



THE



LEISURE HOUR

FEBRUARY, 1885.

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ALMANACK FOR

FEBRUARY, 1885.

1 S	SEPTUAGESIMA S.	9 M	grpt. dist. from ☽	16 M	☽ rises 7.14 A.M.	23 M	☽ rises 7.0 A.M.
2 M	☽ rises 7.39 A.M.	10 T	☽ rises 7.25 A.M.	17 T	Pollux S. 9.44 P.M.	24 T	☽ rises 6.55 A.M.
3 T	Venus a mtn. star	11 W	Orion S. 8.0 P.M.	18 W	Ash Wednesday	25 W	☽ least dis. from ☽
4 W	☽ rises 7.14 A.M.	12 T	Jupiter an evg. star	19 T	Twil. ends 7.13 P.M.	26 T	Rigel S. 6.42 P.M.
5 T	Taurus S. 7.30 P.M.	13 F	Daybreak 5.27 A.M.	20 F	Saturn an evg. star	27 F	Leo S. 11.0 P.M.
6 F	☽ sets 5.12 P.M.	14 S	☽ sets 5.12 P.M.	21 S	☽ sets 5.24 P.M.	28 S	Jupiter near ☽
7 S	Venus ris. 6.37 A.M.	15 S	SHROVE SUNDAY	22 S	1 SUNDAY IN LENT		☽ sets 5.37 P.M.
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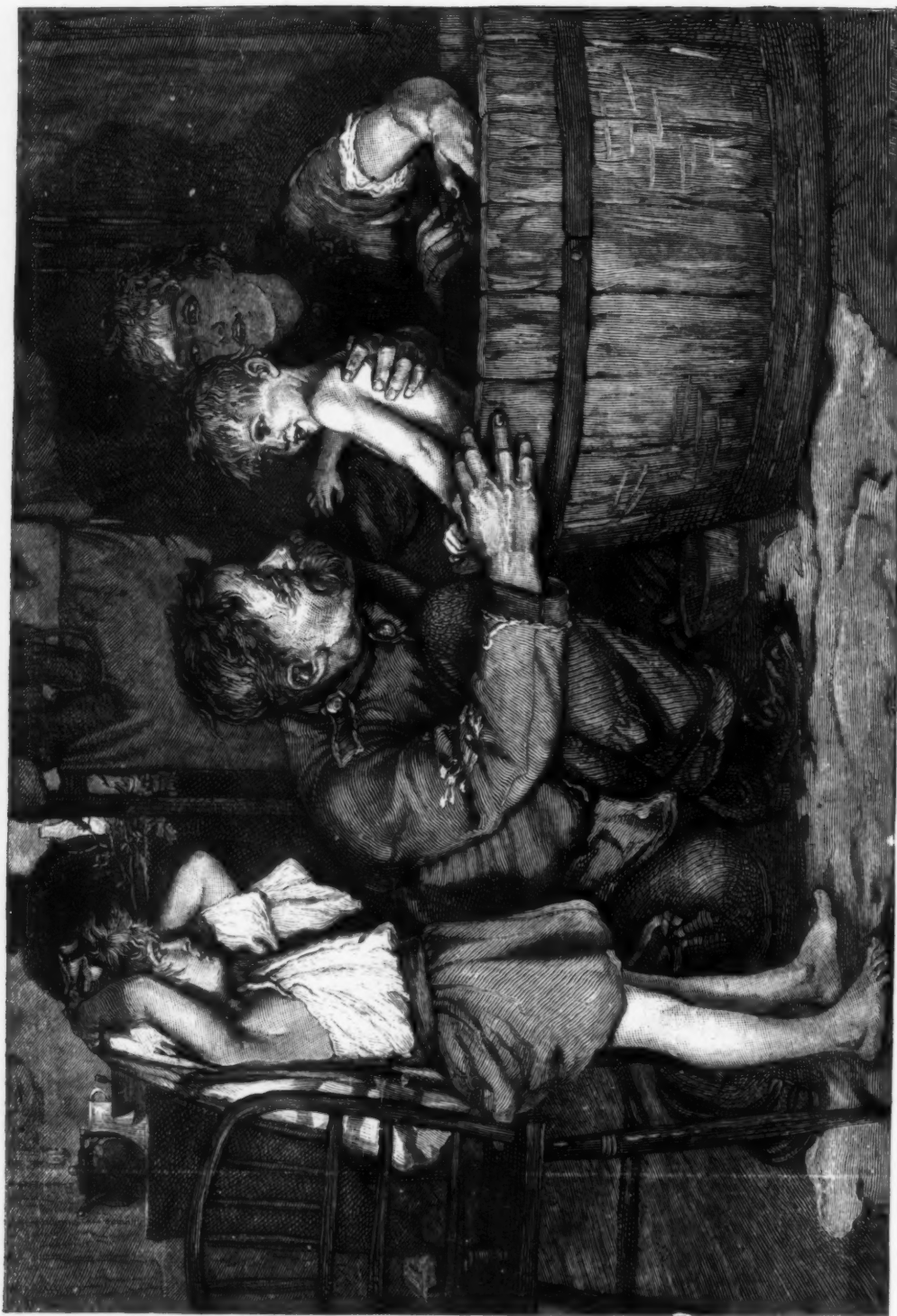
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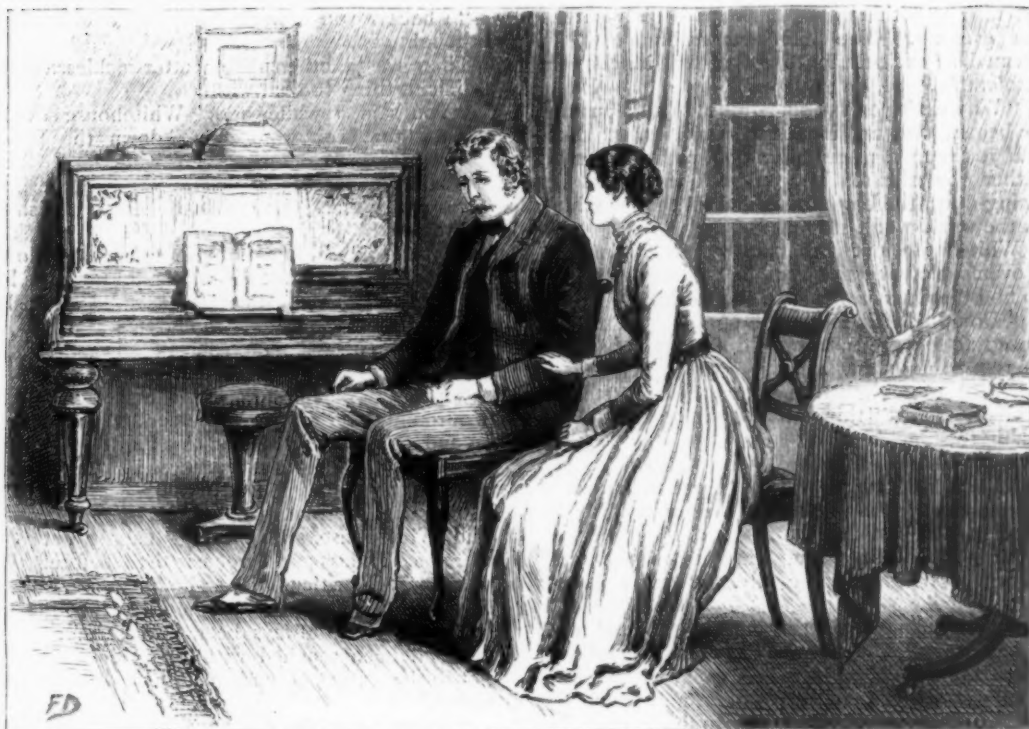
"DADDY'S COME HOME."

[Tarrant]

A LOST SON.

BY MARY LINSKILL, AUTHOR OF "BETWEEN THE HEATHER AND THE NORTHERN SEA."

CHAPTER V.—MUCH OF MADNESS AND MORE OF SIN.



NOT WORTHY OF HER.

For only then, when memory
Is hushed, am I at rest.

—Wordsworth.

IT was not possible in a gossipy little town like Lyme-St.-Mary's that the ways and doings of a young man so popular as Julian Serlcote should escape observation. Hitherto the observation had always been sympathetic and admiring. Even the one or two far-sighted people who shook their heads over certain things had not been heard to advance much in the way of uncharitable comment.

Matters were changing a little now; his friends found themselves called upon to defend him and make excuses for him more frequently than they liked to own. Even Edgar Whitehouse, who could put up with a certain amount of disapproval on his own account, was sorry to feel the creeping depreciation of Julian Serlcote, sorry to know that the change was in no way groundless.

He tried a feeble remonstrance once. It was pitiful work for him, but let him have due credit for attempting it.

Quite late one autumn evening Julian and he

had met accidentally at the top of the Corn Market. Whitehouse was going for a solitary stroll on the Elmhurst road; he had stopped for a moment to light a cigar when he saw a figure coming slowly down the steps of the Westminster Hotel just opposite.

"Is that you, Serlcote?" he asked, doubtfully.

"Yes," said Julian. "Where are you going, old fellow?"

"Home with you."

"No, you're not. I'm not going home. Can't stand the paternal back-parlour to-night."

"What has happened?"

"Nothing—nothing unusual. I wish something would happen."

Edgar Whitehouse hesitated, then said with an effort,

"Well, you will not have to wish long, I should say, if you go on as you have been doing lately."

Julian raised his head quickly, laughing a scornful laugh.

"That comes well from you," he said, ironically. "What's that about the 'first stone'?"

"Don't quote Scripture to-night," Whitehouse said, rather gravely; "and if you won't go home, come for a turn with me."

Julian complied readily; any chance was better now than that of having to face his father or Agnes alone.

They walked on for a while in silence, or silence only broken by Julian trying to hum the first few bars of a French air which he had been listening to with rapture during the early part of the evening. The mere remembrance of it seemed to excite him, to make his own thought intolerable.

"Why can't you say something, Whitehouse?" he began, with an impatience quite new to him. "If you're in a preaching mood, preach; but I'd rather you didn't. It would be no use. I'm going down the broad road, and all the preaching in the world won't stop me."

Whitehouse put his arm within Julian's, a movement of affection that he could have shown to no other human being in the world.

"Don't talk like that," he said. "I'm supposed to be pretty hardened for my years, but there *are* things that I can't stand."

"And there are things that I can't stand," replied Julian; "things that I shall go mad with trying to stand."

"What sort of things?"

"Don't ask me; don't try to get to know the worst of me. I'm a scoundrel and a dastard; be content with knowing that."

"I should like something more definite," returned Whitehouse, coolly. "I'm a lawyer remember."

"Yes, I know you are, and acquainted with villainy of all kinds. You'll be acquainted with mine some day. You will remember me as a man who robbed his own father, and broke the heart of the woman who was to have been his wife."

Edgar Whitehouse made no comment for a minute or two. He perceived that Julian was excited, and that therefore his strong language might be to a certain extent figurative.

"I don't think your cousin looked particularly broken-hearted when I saw her yesterday," he said, after a time.

"No," replied Julian, "she's not one 'to wear her heart on her sleeve'; besides, it hasn't come to that yet."

"Then why should it come to that?"

"That is a question you can answer for yourself as well as I can answer it for you, perhaps better," Julian replied, with a new vehemence of tone and manner. "Don't pretend that you can't see what's going on. It is said that onlookers see most of the game. I should say it's true in this case. I see nothing myself. I am blinded and bewildered."

"And infatuated," added Whitehouse, with a professional clinch.

"Anything you choose," said Julian. "Words will alter nothing."

"Probably not; still there are certain things that would be better altered. Let me give you one piece of information that may be of use to

you. I am sorry to drag Mrs. Talbot's name into the discussion, but let me assure you that she has not the slightest intention of bestowing her fair hand on you."

"Nor have I ever had the slightest hope that she would do so."

"Then why in the name of all that is sane are you acting so madly?"

"Because I am mad."

"I believe you are; or at any rate madder than I thought you."

There was another pause; utter recklessness is a difficult thing to deal with.

"You said a while ago," Whitehouse began again, "that you were going down the broad road. I see no reason to doubt your word. You also said that nothing would stop you. A question arises out of that. Have you the smallest wish to be stopped?"

It was Julian's first impulse to say, "I don't know that I have," but the words did not pass his lips. He remained silent for a while; then he said, sadly, "I'm afraid it's too late."

"That depends upon yourself altogether. It is too late if you're beyond making an effort."

"Effort! What effort can I make? I can't turn round upon myself in the cool way you could do and call myself an idiot, and have done with it. No, let things turn as they will now, there's nothing for me but misery."

"Again I say that that depends upon yourself," said Whitehouse, still speaking calmly, but with more earnestness and emphasis than before. He was much older than Julian; he knew that he had influence over him; sadder, he knew that his influence had not always been exercised for good. He had been touched with remorse before, but not to the extent of endeavouring to make reparation.

"There is only one chance for you," he went on, gravely. "Leave the place for a while; that will change the current of things as nothing else can do. If you remain here and go on as you have been doing I think you are quite right—there *is* nothing but misery for you."

"But how can I go?" said Julian, with a certain amount of contemptuous surprise that his clever friend should offer such impracticable counsel. "What excuse could I make to my father for wishing to go away again?"

"My advice would be this: make no excuse at all; tell him the whole truth. He might be startled, he might be angry, but he would respect your motive, and he would appreciate your straightforwardness. Take my advice, Julian."

There was another pause, a crisis wherein a heart strong for the right would have leapt at once to a right decision. Julian Serlcote hesitated, then said, slowly and sadly,

"It can't be done."

"Why not?"

There was no reply. To have replied truthfully would have involved further confession, confession of debts and of things done to cover debts that Julian knew his father would neither forget nor forgive readily. His absence would bring about disclosures that he dared not even think of.

"You are not thinking of the volunteers' ball?" Whitehouse asked, presently.

"Well, I shouldn't like to be away," replied Julian, not sorry to have a straw to catch at in his extremity. "Besides, the affair is fixed for the 25th of next month. I couldn't go before that time."

"I think you could," said Whitehouse, knowing that the ball would be a test in more ways than one. "I think you could if you tried. It seems to me that your only safety lies in acting *at once*. If I were in your place, and had a father like yours, I should go home now—to-night—and tell him whatever it was necessary to tell."

Julian was touched—almost was he persuaded, but not quite. Whitehouse never knew how nearly successful he had been. It seemed to him that Julian was more dogged, more irritatingly pertinacious, than he had ever known him. For a moment he half repented of the effort he had made. In the days that came after, he repented bitterly that his effort had not been made with tenfold determination.

CHAPTER VI.—AY ME, THE SORROW DEEPENS DOWN.

Woman, one weak, as you say,
And loving of all things to be passive,
Passive, patient, receptive, yea,
Even of wrong and misdoing.

—Arthur Hugh Clough.

IT was fortunate—or unfortunate—for Julian that just at this juncture none of his family seemed to have leisure to be very anxious about him. Elizabeth was ill, suffering from a dangerous illness, and everybody's thought was about her.

This commonplace elder sister was strangely missed from the household. She was not clever; no one could remember ever having even smiled or sighed over anything Elizabeth had said; but she was much given to smiling herself; it was an easy substitute for speech, a thing by no means easy. Perhaps it was this genial, honest smile of hers that was so much wanted now that it was missing, and it may be that other little-prized things were also discovered to be of value; household order and punctuality and a pair of capable womanly hands, ready in womanly fashion to do whatever might be found to do with all their might. Mrs. Serlcote was nervous and tearful and fussily helpless; the children were awed into sad, silent idleness. Agnes's whole time was spent in Elizabeth's room.

Poor old Joshua Serlcote seemed to be never weary of wandering up and down between that room and the shop. He used to stop at the foot of the stairs, take off his boots there, and then go up quietly, grimly, with head erect and lips compressed, the tenderness in him nowise visible save in the act he did. Agnes used to listen for his gentle tap at the door. She liked his coming. Sometimes when Elizabeth was asleep he would stay a little and sit and talk by the fire in soft whispers. Agnes did not know it, he hardly knew it himself, but there was no one else in the

house to whom he talked so much or with so little reserve.

When he had first talked to her of Julian the old man had betrayed with touching simplicity the pride and delight he had in his son. No detail seemed to have been too minute for his notice. "I never saw the gentleman who could hand a teacup with more grace than that which is natural to my boy," he said one day. Agnes could not help smiling, but she was much impressed. It seemed strange that the stiff, prim, ungraceful old man should have an eye so keen for gracefulness. She never forgot that nor some other things that slipped quietly and sadly out of sight.

Then came a time wherein his talk about Julian insensibly took an apologetic tone. Whatever the son did the father seemed anxious to set in the fairest light possible. He never lost an opportunity of doing this. It comforted him, helped him to believe his own word. No one knew how pathetically he had determined to believe it.

Now, however, rumour had reached his ear, the pain had gone deeper into his heart because of it, and the old man had for some time past fallen into silence concerning his eldest son.

Agnes had not seen Julian for over a week. He was seldomer than ever to be seen in the house or the shop or in any place where he might reasonably have been looked for, and there was a kind of impassiveness about him that precluded much questioning. Even his father felt it, hesitated, and suppressed inquiries that would have been better made. It was known that the volunteer ball was impending, that Julian believed himself under the necessity of superintending the preparations in person; in fact, he made quite a hardship of it. The Town Hall had to be decorated, the feminine taste of the neighbourhood—or rather such of it as was available—had to be pressed into the service, and it was well known that there was no other person belonging to the corps so thoroughly fitted for duties of this kind as Julian Serlcote.

His satisfaction with this state of things was genuine, so far as it went, but it did not go nearly so far with him now as it would have done a year ago. That fair youthful face of his was already beginning to speak of a life not fair in any way. He complained of weariness, and it was not difficult to believe him; belief was more difficult when he strove after that easy disengaged tone and manner that had been one of his most winning fascinations.

He disappeared very early on the day before the ball. His father had meant to urge a single word of remonstrance, perhaps to add one of warning also. Poor old man! he had thought over it much, nay, he had even uttered a prayer over it, that it might prevail a little, that he might speak without anger, without hardness. But no chance was given him of speaking at all. Julian did not return until the evening, just in time to dress; he had not a minute for anything else.

He looked unusually well, and he knew it. He was excited already, and his excitement lent a

glow of colour to his face, a deeper lustre to his eyes. He had taken extra pains, too, with his beautiful yellow hair, brushing it into the soft waves and curls that he knew Agnes so much liked to see. His first thought of vanity turned to her. Should he go gently to his sister's room for a second or so? He stood hesitating at the top of the long passage, strongly inclined to venture down. He might have gone, and it might have been well for him; but just at that moment the band struck up a stirring strain in the Corn Market; it was quite time he was at his post.

Think of it then, more than a week since Agnes had had any sight of him! Had the separation been the ordinary one of miles Agnes Dyne was a woman to have borne it with at least ordinary resignation. Her love was not of the restless, doubting, passionate kind that is for some people the only form of love. She was true and faithful herself, and had looked for nothing but truth and faithfulness in return.

Julian had quite insight enough to know something of the workings of a nature so different from his own. He did not think that because Agnes was quiet and natural and undemonstrative in her loving, as she was in all other things, that therefore her love was a thing of no depth or intensity. There had been times when he would have been glad to think so, when his knowledge of her strong, deep-rooted affection had been little more than a burden to him; but these times were transient and surprising to himself in sane moments.

These saner moments of his were few and far between now. Life was putting on for him the aspect of a dark and wide confusion. He drifted with this current and with that, finding no anchorage, seeking none.

The ancients had a belief that temporary bewilderments of this kind might be heaven-sent. It was an easy if not a satisfactory way of accounting for things not satisfactory in themselves. Does any remnant of this notion linger, facilitating self-forgiveness, weakening resolution, making repentance itself a thing to be repented of?

Agnes Dyne sat altogether silent, altogether stirless, while Julian was leaving his room, coming down the three steps at the door of it, standing hesitant on the landing. She understood it all, knew how he would look, the pardonable touch of vanity that would be in him, the desire to have that vanity gratified. Her heart seemed to stand still too, until the band struck up and Julian hurried away, then it beat somewhat wildly until it flagged to the dull sickening sound of the door closing after him.

She wished she had gone out to him as he stood there. Why had she not? Was she resenting his absences, his neglects, his coldnesses? If so, then she was acting foolishly, as she knew. Resentment, betray itself how it will, never yet wrought any touch of acceptable sorrow in man or in woman; never yet infused life into a languid love, or helped for a moment to revive a dead or dying one.

But Agnes could feel little self-distress here. She knew sadly that she had obeyed stronger and

truer instincts. If she had loved him less she might have been less diffident in her love.

Sitting silently in that prosaic room of Elizabeth's, with the heavy sound of the closing door lingering on her ear, with heavier things lying on her heart, she was more conscious of sorrow than she had ever been before. She was more conscious of sorrow, more conscious also of the love that made her sorrow.

In almost all true affections there are hours wherein the strength, the reality of the feeling seems to dawn anew with sudden power. Life is lit up with a new light, hidden things are made visible, hidden or unrecognised pains and troubles as well as unrecognised joys.

This was such a moment of reawakening for Agnes. Love slighted, wounded, stung into passionate longing, surpasses in strength love satisfied or hopeful as far as the storm-troubled sea surpasses the sleeping lake.

No such hour of wild unrest had ever been hers hitherto; her emotion was stronger than herself, and therefore not to be understood of her, nor altogether controlled.

Hers was not a tearful nature, and it seemed to be no time for weeping over any sorrow of her own while watching by the sick bed of another; yet a very tempest of tears shook her as she sat there, tears not to be forgotten so long as anything should be remembered. Elizabeth was sleeping quietly; Agnes crept away to the other end of the room. All the others had gone to bed save Joshua Serlcote, who sat alone in the parlour below.

Poor old man, he too had been intending to go for some time; he hardly knew why he did not go. He was weary, more with an ill-concealed anxiety than with any labour that he had done. His sole consolation, the long clay pipe, was less consolatory than usual. The fire, let him attend to it how he would, refused to be a cheerful fire at that hour of the night; fresh coal seemed to burn to dead white ashes as if by alchemy.

Once he thought of stealing up to his daughter's room, but now that she was out of danger perhaps Agnes would be sleeping. He wished that he too could sleep, and forget the trouble that he could neither look at bravely nor put away from him.

The hours crept on very slowly; midnight, two o'clock, three, four. One more pipe and then he would go to bed, certainly he would go after one more. This he had said to himself a dozen times. But as it was getting so late it might as well be a little later. Half an hour could not matter now; if only the fire would burn, if the room were not so chilly, he should not mind in the least.

He was too much wearied for any impatience, for anything but quietly sitting there, not knowing why he sat.

As the morning went on once or twice sounds from the street reached him, rousing him to slight touches of resentment, stirring that other watcher in the room above to new fears and sadness not at all slight.

All through the night they had heard the Town Hall clock booming out slowly and solemnly

through the darkness, speaking of quite other things than the revel going on below.

No tinkling cemetery bell was ever half so impressive as that ancient clock of Lyme-St.-Mary's striking in the night. If ever you had listened to its tone while watching or suffering, you never heard it again without hearing the echo of those hours wherein you listened so sadly.

It was a long time after five o'clock had struck when sounds of uncertain feet and much-raised voices were heard coming down the passage that led to the side door of Joshua Serlcote's house. The old man listened nervously, irritably; then a long loud knock awoke in him a feeling that was half anger, half fear.

There was no light when he opened the door, but just then Agnes came tremblingly to the top of the stairs with a lamp in her hand.

"Remain where you are," her uncle said, in a hard, grating tone. Then he turned angrily to the noisy group outside; he could not distinguish any face. A voice out of the darkness said, amiably,

"Brought your son home, sir."

"He ain't well," said another voice, equally pleasant in tone.

"Been dancin' too much," added an explanatory person in the background.

"All along o' that ere young lady wi' yellow hair and blue-an'-silver gownd," apologised a fourth.

"Silence, every one of you!" cried Joshua Serlcote. I use the word "cried" considerably, for his tone was one of such extreme pain that no other word would do so well.

"Silence!—Julian, are you there? Dismiss your friends, sir."

* * * *

Imagine it—that grey-haired, irreproachable old man watching by the sofa in the narrow, chilly back-parlour for another hour or more, watching in the strictest silence.

Then he bestirred himself. The man who had sat there all night, with no creature comfort save his clay pipe, betook himself to the making of strong tea for the bright-haired Absalom who had bowed his spirit to the very dust; and his Absalom took it, but not with the grace with which he had been wont to handle a teacup.

This was no time for words. Julian watched his father's tremulous, awkward movements, saw his grey, worn face, that seemed to have grown greyer since yesterday, and, seeing, he was touched to things he dared not utter.

They sat there till the wondering Sarah broke in upon them with brush and duster, then the father and son went upstairs together, the son to sleep heavily till the middle of the day, the father to find sleep not possible, nor rest of any kind for mind or body.

There was one other sleepless head, wearied with listening, thinking, sorrowing, praying; nay, there were two who had not slept much—Martin, in his attic room overhead, Agnes, in the room down the long passage.

Since Julian's return her sorrow had been even

more bewildering than before, more mixed with pity and perplexing doubt and yearning forgiveness. She had acknowledged to herself that his character was one that it was very difficult for her to understand, but she understood something of his capacity for suffering from remorse. There had been times when she—not knowing his error—had fancied his contrition exaggerated; and, remembering these times, she grieved sadly for the grief that she knew must be his to-day.

She was not wrong in fearing that that would be a dark day for Julian. It was darker than she knew.

The night that had passed was a kind of crisis in his downward progress—one of those turning-points that affect a man's position and colour the character he bears with tints more indelible than he may be aware of at the time.

Julian was not fully aware of the causes he had for sorrow, but he had no wish to know more than he knew already. He dared not look back, still less dared he look forward.

The November afternoon was passing on when he came down from his room. A grey gloom hung over the town; the house was still and silent. There was no one in the sitting-room save his mother, who was knitting socks for him, wishing mildly that he would not vex his father so much, nor run such dreadful risks from exposure to night air. At the same time she had a private opinion that her husband was apt to vex himself needlessly where Julian was concerned. Once during the forenoon she had ventured upon a remonstrance.

"You shouldn't expect too much, Joshua," she said, in tones that were weakly acidulous. "Young people will be young people, remember."

Finding that this original proposition was received in silence, Mrs. Serlcote yielded to a certain sub-indignant feeling, only to be expressed by the faster clicking of her knitting-needles. It was a relief to her when Julian came down, looking chill and pale, and much in need of the appetising little repast which she had duly prepared. He was in a mood to be grateful for sympathy of this practical nature—very quietly and silently grateful.

He did not remain there long; tea-time was drawing near, and he had no wish to face either his father or Martin so long as he could avoid doing so.

It was nearly dark now. He went up to the drawing-room and lit the gas, not perceiving a tall, slight figure standing between the curtains of the farther window. He was a little startled when a troubled wistful voice said, "Julian!"

It thrilled through him as a cry of pain might have done. He was quickly by Agnes's side, holding her hand caressingly, speaking in soothing tones.

"What is it," he asked—"what is the matter? Are you ill?" Then he said, tremulously, "Is it because of me? You are not grieving for me? Don't do that, I am not worth it. You must try to forget me; I think I shall have to go away soon. I don't know what will happen to me, but I should like to know that you are not caring,

Agnes, you must try not to care—not to suffer. At the best I was never worthy of you.”

Again tears were dropping slowly on Agnes’s face; sad, bitter tears, not to be dried by being told not to care.

“Do you think one can only love people who are worthy of being loved?” she asked.

“I don’t know,” he said, absently. He was thinking of other things—thinking thoughts that took the strength from him even as he stood. He sat down, or rather sank down, despondently.

“Don’t talk to me, Agnes,” he said; “at any rate don’t talk in that way. You would not if you knew all; instead of loving you would despise me.”

“Do you think so?” she asked, speaking through her tears, laying her hand softly on his. “Do you think I could ever hate what I have longed for during the last eight days with an intensity that has been almost sin. Julian, I don’t think you quite know what my love is.”

She spoke so simply, so truly, and out of such a depth of trouble, that he, in that sadder trouble of his, could find no reply.

“If you are grieving,” she went on, “sorry for the things you say I don’t know about, why not put them away from you at once and for ever? Is it not possible—

‘To be as if you had not been till now,
And now were—simply what you choose to be?’”

Julian looked for a moment as if he were half bewildered by the idea. A change passed over his face; he seemed to awaken more completely to consciousness of his sorrow and his sin.

“If it were possible,” he said, “I would strain every power that is in me to do it.”

“Can you not tell me why you think it impossible?”

“No. If I could tell you—or, rather, if I could tell my father—the worst would be over, but I can’t do that. He has trusted me so that I think I could face death sooner than face him with the confession that I had betrayed his trust.”

This was worse than Agnes had feared. She only half understood, but she shrank tremblingly from trying to understand.

“Is your father so hard?” she said, gently. “Can you not see for yourself how he loves you? and is it not the grand use and beauty of having some one to love you that you may have some one to bear with you?”

There was a slight pause; Julian spoke again:

“He has borne much, but there are things that he would never bear. I know him better than you can know him, Agnes; and I know myself, or rather the position I am in. Don’t make another effort to save me. Forget me, and help my father to forget me. Remind him that he has other sons who may be more to him than I have been.”

“I should be saying what I did not believe. Oh, Julian, think of the Shepherd’s joy over the one sheep that had strayed; the ninety-and-nine that had never wandered were as nothing to him in comparison. Your father is troubled now—so much troubled with doubts and fears and anxieties,

that if you were to go to him confidently and tell him the worst, I feel certain he would be so much relieved as to be ready both to forgive and to forget.”

Again for a few silent moments Julian Serlcote halted between two opinions. To get rid of that perilous load of secret sin before it brought him to an open shame seemed far too fair a possibility to be realised. Yet the prospect made his breathing quicker, his pulse irregular. There was no power in him to think clearly and steadily, much less to resolve with any degree of firmness. He was tied and bound with the chain of his past sins, even more completely than he knew.

“I—I will think of it,” he said, falteringly. “I know it is my only chance.”

He had risen now as if to go. As he turned, Agnes spoke again beseechingly, fervidly:

“Don’t rest content with the thinking of it, Julian,” she begged; “at least pray over it. Remember this—

‘There is no place where earth’s sorrows
Are more felt than up in heaven;
There is no place where earth’s failings
Have such kindly judgment given.’”

Then he went out with these words ringing in his ears. They had no power to soothe him. He felt more unhinged than before, more desperately in need of some nepenthe that should lull his soul into that death-like sleep which was the only peace now possible to him.

Martin was standing outside in the dimly-lighted Corn Market, watching and whistling, with his hands in his pockets. It was a fine evening, cold, but clear and starlight.

“Come for a walk, Julian?” he said, in that pleasant, winning voice of his.

But Julian was in no mood for walking.

“Can’t this evening,” he said; “I am going up to the Westminster.”

Martin wondered at him sadly. Was Julian bent on finding to the uttermost how true it is that some men can only become pure from their errors by suffering for them?

CHAPTER VII.—MARTIN DOES EVIL THAT GOOD MAY COME.

A nature quiveringly poised
In reach of storms, whose qualities may turn
To murdered virtues that still walk as ghosts
Within the shuddering soul and shriek remorse.
—*The Spanish Gypsy.*

THOSE people spoke altogether unfairly—one may say ignorantly—who attributed Julian Serlcote’s deterioration solely to the influence of Mrs. Talbot. She had—perhaps not altogether unconsciously—thrown over him a certain spell of infatuation, which had blinded him, intoxicated him, confused his way altogether. She had drawn him from his home, sympathised with his errors and his weaknesses, but she had not been the cause of these errors. The lines upon which his life had been laid down before Mrs. Talbot’s arrival were sufficiently determinative.

He had never really swerved from them. He was proceeding steadily—or unsteadily—towards that dark vanishing-point where the said lines converged. People had ceased to whisper; they spoke openly and unhesitatingly. That *prestige* which he had so appreciated himself, and which his father had so valued for him, was fast departing, and its departure was felt both painfully and distinctly.

Change was visible even in his appearance. There were times when there was an expression on his face that was almost one of degradation. His temper, too, was becoming uncertain. The children were not now always glad when Julian came in. His manner, that had been so kindly and pleasant, was often sullen or peevish. The poor little things learnt to watch and wait; to withhold any tendency to too sudden joy if on any occasion Julian seemed to be himself again.

But Julian's happiest, or rather his least miserable, hours were spent at Mrs. Talbot's. It would be difficult to define the exact nature of the feeling he had towards her, or to describe the evil case into which his love for Agnes Dyne had fallen. He was bewildered himself, and doubtful. That he still had love for Agnes he knew certainly—nay, he even came near the truth as to perceive that it was the reality of his love for her, his appreciation of her goodness and purity, that many a time kept him from her presence, that oftener still made him seem stiff, and cold, and unconfiding, while she was spending her best and tenderest self in effort to draw him from the wilderness wherein he wandered. His conscience disturbed him, but less and less distressingly as the days went on. He had refused to listen too often and too persistently for this still small voice to have much power over him now.

Still, it had power enough to make him glad of anything that should conduce to even partial oblivion.

It was more than merely pleasant to him to be soothed by the languors and sentimentalities of Mrs. Talbot's emotional music to forget his sorrows, his sins, and their probable consequences, in listening to her low and unconsciously artificial tones—tones that, notwithstanding their unreality, were listened to everywhere with deference and attention. She was never at a loss for topics of conversation. Art, science, literature, music, politics, or cheap theology—nothing came amiss. Her silvery-sounding platitudes were always ready, always selected with wonderful tact to suit the society in which she happened to find herself. High Church, Low Church, or no church at all, it did not matter to Mrs. Talbot. People invariably left her presence more satisfied with their own views than before, and more than ever convinced that she was the one understanding woman they had ever met.

Of course she knew, as everybody else in that little world of Lyme-St.-Mary's knew, that Julian Serlcote was just now "promising badly;" that was the euphuism they used. Yet it did not alter Mrs. Talbot's manner to him in the least. Why should it? She was a woman who knew something of the ways of a wider world than that, and

was proud of her knowledge. Even when a kindly but narrow-minded friend warned her that her name was being coupled with young Serlcote's more freely and frequently than was expedient, she only smiled, but her smile was very pitying, very superior. She did not say much, but in the few words she used she managed to imply a great deal more.

That was her way, and a clever way it was. She could, by sympathising with people, open their eyes to grievances that affected themselves, but which they had hitherto lacked either sense or sensitiveness to perceive. Julian had never really felt how narrow his home was, how uncongenial his surroundings, how impossible the slow, monotonous life that he was expected to live, until Mrs. Talbot's compassion awoke him to fuller consciousness. There had been times when by the gentlest and vaguest suggestions in the world she had caused him to look with very doubtful satisfaction upon his engagement. Her influence in this and in other things might only be temporary, but it was not the less a weight in the balance.

Julian was to be found at her house well-nigh every evening now. Sometimes other friends were there, at other times, to Julian's greater contentment, no one was present save Lerna.

It was not that Mrs. Talbot and he had anything special to say to each other, but that the things that were not special could be talked of with less restraint. If he were in a despondent mood Mrs. Talbot was more at liberty to devote herself to the task of cheering him; if he were musically inclined she could play the music she knew would please him best. By degrees he came to feel a silent resentment if any other friend of hers dropped in unexpectedly, more especially if that other friend was Dr. Sargent.

One evening—it was again close to Christmas-time—Julian had left her house much earlier than usual and in no very pleasant mood. He had gone there tortured with remorse, with dread of impending discovery, haunted by the silently reproachful faces he had left in the Corn Market, wearied of life and of everything that life seemed to offer him, and feeling that even in that rose-pink drawing-room, with its gilding, its sympathetic sentiment, its cushions, and its consolations, there would be no peace for him that night.

But the room and its occupant had wrought their old charm. There was no reproach for him there, silent or other; no one to irritate him by urging him to effort that was distasteful, to acts that were impossible. Mrs. Talbot's gracious smile, her soothing music, her quiet, tranquil ways, had never been more grateful to him.

But he had hardly begun to give himself up to the restful feeling that was stealing upon him when Dr. Sargent announced himself, walking in, greeting Mrs. Talbot and Lerna, seating himself, with an air of familiarity that was most disturbing. Mrs. Talbot seemed disturbed too, even slightly tremulous, and Lerna smiled and blushed in quite a mystifying manner. The doctor himself appeared to be in an unusually comfortable mood, and more disposed to patronise Julian than he had been for some time.

Julian could not bear it long; he grew feverish and irritable, and rose to go suddenly. Dr. Sargent smiled in a very vexatious way, and Mrs. Talbot did not mend matters by seeming somewhat colder than usual. She gave him her hand very graciously, but her tones were distinctively polite as she said, "Good evening, Mr. Serlcote. I hope we shall see you again some time this week."

Julian looked up with undisguised astonishment. He had for so long come and gone just as it suited him, that he could not remember the time when he had had any invitation. Was this meant to put things on a new footing?—and why?

He was leaving the room, when Mrs. Talbot spoke again, less frigidly than before.

"By the way, is not Miss Dyne's year of mourning over now?" she asked.

"Yes," said Julian, blushing hotly, and feeling the doctor's smile like a ray from a burning-glass.

"Then do bring her with you. Tell her not to wait to be formally invited, but to come up in a friendly way. Shall I fix an evening? Shall I say next Tuesday, and I will have one or two other friends to meet you?"

"Thanks, thanks!" said Julian, much excited, and hurrying away even as he spoke; and it may be noted as curious enough that in the midst of the wild tumult of feeling that possessed him his first distinct idea was one of indignation on Agnes's account. The mere mention of her name by Mrs. Talbot in the presence of Dr. Sargent had, for various not very patent reasons, jarred upon him, Mrs. Talbot had so seldom spoken of Agnes, and had even contrived to make him feel as if there were some latent delicacy in refraining from speaking of her. And as to waiting a whole year because of her mourning before inviting her to spend a quiet evening, there was absurdity on the face of it.

Still, unreasonably enough, Julian's resentment glanced aside from Mrs. Talbot. He could not blame her. It was easy to blame himself, easier still to blame Dr. Sargent. The more he thought the more confused and vehement his thought became.

His sense of disapprobation was keen, but in what was he disappointed? Had he missed an evening's entertainment or a life's purpose?

He did not know himself. He went striding along the dark road, through mud and sleet and piercing wind. He could see nothing, hear nothing, hardly even his own footsteps. Other footsteps were approaching. The two black figures had nearly walked each other down, when both uttered a warning exclamation. Then Julian demanded sternly:

"What are you about here, Martin? Acting as a spy, I suppose?"

"I was intending to wait until I met with you," said Martin, with some determination.

"Exactly! And now that you have met me?"

"I want to speak to you."

"Well! speak out, I'm not exactly in a listening mood; but say what you've got to say."

"I can't say what I've got to say here," replied Martin striving with the utmost effort to keep

command of his words and tones. "If you will come home with me, and go up to my room or yours, we can talk things over quietly."

"A pretty programme!" sneered Julian. "Come along to the Westminster, if you are bent on making yourself disagreeable."

Martin offered no objection. The two men went silently along the road and into the town. The wet streets were cheerless in the dim lamp-light. Julian shivered and looked pale as he went up the steps of the hotel. Perhaps he was in need of that steaming glass for which he called so eagerly and appeared to enjoy so thoroughly. Martin waited in unrefreshed patience.

"Now then, old wet-blanket, let's have this doleful story," said Julian, in more amiable tones.

"It won't take long in the telling," said Martin, fixing his sad blue-grey eyes steadfastly on his cousin. "Grant and Greenlow have written to demand payment of that account of theirs."

Julian's paleness became paler, and his lips turned to an ashen grey. He did not speak. Martin had half expected an oath, a rare thing from Julian; but this was a rare occasion. There are, however, circumstances under which the strangest language is weaker than silence.

When Julian did speak it was to ask a question, but his tone was that of one who affirms.

"I suppose my father has got the letter?" he said.

Martin's guilt had now to come to light. He blushed hotly and quickly as a girl blushes.

"No," he said, speaking rapidly and with evident shame and distress. "No, I have it with me. I have intercepted it and opened it. Of course I knew what it was. I have expected it for weeks. It only came to-night. I could not rest until I had seen you."

Julian mused awhile, leaning his head on his hand, staring into the fire.

"It's all very good, my dear fellow," he said, presently; "but it's only a respite. They'll write again and speedily, if this letter is not attended to."

"And you can't attend to it?"

"Why ask the question? I can write, asking for time; I can do nothing more, as you know. I have not had a shilling these two months but what I've got from my mother."

There was another silence, which was broken by Martin.

"Is it any use my entreating you again to tell your father?" he asked.

"Not the slightest. I will face any other course than that."

"What other course is open to you?"

"There are two others, and only two, committing suicide and absconding. I shall try the latter to begin with."

Was he mad, altogether mad? Martin wondered. Sitting there, possessed of youth, of a constitution naturally good, of a certain amount of a certain kind of talent; the son of a father who secretly worshipped him, who openly and patiently bore with him; the betrothed husband of the one good

and beautiful and lovable woman that Martin had ever seen, and yet giving himself up to despair and ruin, without hope and without effort. The sight was as incomprehensible as it was distressing.

"Julian," he said, presently, "to talk in this wild way is foolish enough, as you know, to act with any such wildness would be worse than foolish. This is a bad business, and, to speak plainly, I fear you know of others as bad. But I feel convinced yet that we might make matters all straight again in a couple of years, that is, if you will set your shoulder to the wheel at once. You have a good allowance; and my uncle told me that he should make at least half of the business over to you when you married; in fact, I believe he is only waiting for you to settle down to make the offer. As for present difficulties or anything that may turn up unexpectedly, well, you know, I don't mind a little unpleasantness on my own account. I can take a fair amount of blame any day. Let me manage that. And as to this affair of Grant and Greenlow's I have sixty pounds in Forrest's bank—that's about half. Send it up to-morrow, and ask for time for the remainder. We must manage it between us, somehow."

How easy it all seemed to Martin! Julian thought, rather bitterly. How impossible it was to himself! He sat there leaning over the table with his face buried in his hands, his whole attitude expressive of the misery and defection that possessed him.

"It's no use, Martin," he said, sadly, after a time. "I shall not take one penny of your money, and you shall not take one iota of my blame. But don't think me ungrateful, don't think that I can't see all that your offer means."

"I shall certainly think that you don't see what I mean if you refuse."

"Refuse I do, and shall! I'm low, but not so low as that!"

"Then you will have to go lower."

"Doubtless; but I shall go alone."

"That you can't do. Julian, listen; I'll tell you another piece of truth that I never intended to breathe. I'm making these offers as much for her sake as for yours. If I could save her from the pain that she will suffer—that she is suffering—through you, I would willingly give all I have to give."

Julian looked up, and a tinge of colour came to his face.

"Don't misunderstand me," Martin went on, tremulously; "I should as soon dream of falling in love with one of the royal princesses, but I might even dream of averting trouble from one of these if I had the chance."

In the midst of his distress Julian could hardly help smiling at the thought of Martin as a rival—plain-looking, sallow, awkward Martin Brooke!

There is no need to remain in that small private room at the Westminster any longer; no need to listen to any more of Martin's unsuccessful pleading, or of Julian's determined resistance. If Martin had known all, he might have given in sooner, but it seemed to him that Julian was shutting out hope wilfully and blindly.

What could be done? Martin wondered as he went home alone, reluctantly leaving Julian behind him. Nothing had been settled or decided. That letter of Grant and Greenlow's was still in Martin's pocket, weighing heavily there—and other things were weighing more heavily yet in his heart. It had been once on his lips to ask Julian straight out what truth there was in the rumour that connected Mrs. Talbot's name with his so openly—this not so much for his own satisfaction as for Joshua Serlcote's, who was, as he knew, fretting not a little in secret over the hints that he had had concerning Julian's infatuation. Martin himself had for some time found it very difficult to give any credence to these reports, but latterly he had been obliged to confess that Julian was lending colour to them. Doubtless it was done more in idleness and thoughtlessness than of set purpose; but Martin wished now that he had made some allusion to the matter; he might at least have offered a warning.

A very few days later the inhabitants of Lyme-St.-Mary's, in their surprise and sorrow, were casting blame about everywhere except on Julian Serlcote himself. He was so young, and had been so bright and pleasant and generous; it was his very virtues that had led him on into vice. Why had no one taken him in hand—tried to arrest him? If not by persuasion, then by sheer force? Those who knew least about him felt this conviction strongest—that he might have been saved if any human being had strongly willed to save him.

CHAPTER VIII.—TOO LATE.

Man should do nothing that he should repent;
But if he have, and say that he is sorry,
It is a worse fault, if he be not truly.

—Beaumont and Fletcher.

THAT was a livelier Christmas Eve than usual. The Serlcotes had always kept up a few traditional customs—such as the eating of mince-pies, the burning of a Yule-log, and the ceremonious cutting of the big plum-cake, but these observances had generally been conducted after a very dry and lifeless fashion. Things were a little changed this year. There was to be a children's party on the day after Christmas Day—a real party, such as Fanny and Nellie had been dreaming of half their lives, and Agnes had undertaken to superintend matters from beginning to end.

For the first time a Christmas-tree had entered the house—a tall, graceful fir-tree top, that seemed to have been taken straight out of a picture. Joshua had bought it himself in the Corn Market that morning, and it was pleasant to see him rubbing his thin white hands as he watched his children's eyes sparkle. This kind of satisfaction was new to him. For the greater part of his life he had—perhaps not quite consciously—looked upon women and children as creatures to be repressed—repressed as much as possible, and on every possible occasion. It rather surprised him to find they would bear quite another kind of treatment; it surprised him equally to find himself.

making the necessary experiments. He had been drawn into it unawares, and that niece of his, with her quiet smile and her gentle ways, was the magnet that had drawn him. He did not dislike her for it.

He could not keep away from the busy scene; that was also so pretty. He was not so much at ease as he tried to seem, but he was easier in that little room, where there was such pleasant ado about nothing, than he was anywhere else.

After tea, when it was quite dark, he took his hat and walked with great dignity across the square. There was a shop on the other side—not exactly a toyshop, but a place where toys were to be had. Joshua went in, stayed a while, and came out behaving very pompously all through, and *bearing* rather than carrying his parcel as he might have borne the Crown jewels.

Yet he could not prevent his eyes from twinkling, nor his hands from trembling a little as he undid the string. There was an exclamation that was almost a shout. Such glittering, sparkling treasures had surely never been provided for any Christmas-tree before! There were birds and flowers, fruit and fairies, crimson and gold, and silver and green; crystal lamps with real tapers in them, and coloured flags of all nations. Sam, who was standing on the sideboard, was in such hot haste to fasten a flag to the top of the tree that he put up the first he could reach; then there came a real shout from John.

"That will never do! Can't have the Stars and Stripes floating higher than the Union Jack! Here you are, Sam."

Sam was still blushing, the younger ones laughing, the old man chuckling quietly, when the door opened and Julian came in, pale and weary-looking, but trying with what heart was left in him to get up a smile that should be equal to the occasion.

Nellie was perhaps his favourite sister, and he took her small brown head between his hands very tenderly.

"Oh, mind my hair, Julian," she said (she was a neat, precise little thing)—"mind my hair, and *do* come and look; and don't be tired to-night. It *is* such fun!"

But Julian was very tired; you had only to look in his face to see that. Agnes only glanced at him once, smiling a greeting to him in her own fascinating way. He smiled back, but very sadly; and his sadness deepened as he stood there watching her.

Yet he stood some time, appearing absent, but his brain was very busy.

One thought struck him like a blow—what if he should never stand there again?

He took in the scene in all its details, hardly knowing that he did so. There was his father by the table, tall and grey, holding himself even more stiffly than usual, yet for the moment as much pleased in the children's pleasure as were the children themselves. By the fire his mother sat knitting, from time to time dropping stitches that Elizabeth had to take up again, or remarks that nobody thought it worth while to take up. In the middle of the room, now on this side of

the laden branches, now on that, there was his betrothed Agnes—gracious, graceful, winning, as she always was, but seeming in some indefinite, sad way at a new distance from him. Did she know it? Did she feel as he did? That could hardly be.

While he was thinking he was noting other and more trifling things that were about him; there was the old red chintz, the dingy carpet, the commonplace pictures. Then his eye rested on the cage where Sam's linnet hung, then on Sam himself. It did not seem so long since Julian had had linnets and thrushes of his own.

His memory was very vivid to-night, very clear, and opened her "folded annals" with a strange tenderness.

Was it not all a horrible nightmare that had happened lately? Could he not, if he strove sufficiently, free himself from the oppressive burden that lay on his heart and on his brain, crushing his life and his youth out of him with pitiless insistence?

He turned away sadly; and his father left the room at the same time.

"Julian," he said, making a rather futile effort to speak in a tone of unconcern—"Julian, I think there is a fire in the drawing-room; let us go up and see. I rather want to—to talk over some little matters."

Julian followed his father quite silently, but not without a certain uneasy fluttering of heart. Had the old man heard anything? Well, things could not go more hardly with him than they were going already.

But this fear passed away from him. His father's manner was almost deprecating.

"Sit down, Julian," he said—"sit down. We mustn't smoke here, I suppose, but we can manage without. It's very cold, though, isn't it? Come nearer the fire."

The elder man went on rubbing his hands in that nervous way of his; Julian was quite calm. "Whatever is, is bad, and any change is likely to be worse," he said to himself, quoting from a page of "Middlemarch," which he had glanced at as it lay on Mrs. Talbot's table. Its appropriateness to his own case had struck him at once; and he had said it over so often that he had begun to feel as if there were some kind of philosophy in it.

"You see we shall be going into the accounts presently," Mr. Serlcote began, in an uncertain tone, "and I thought we had better—well, better just talk over things, you know. You are three-and-twenty now, Julian. Time to take life a little—well, a little seriously, eh?"

Seriously! Julian put his hand up to his hot forehead and almost smiled. What could he say? Take life seriously, when for months past he had taken it as if he had been tottering in the dark on the edge of a precipice, knowing that nothing short of a miracle could save him in the end. He had not had experience enough to know how many a time such divine miracles *are* wrought in this human world of ours. He had not faith enough to dream for a moment that such a miracle could happen to himself. He kept blindly to his

perilous way, effortless, hopeless, prayerless. He would listen patiently to what his father might say; he would not vex him; he would try to part from him at least calmly.

"You see you have been engaged now over a year," Mr. Serlcote began again, timidly. "Of course you are young enough. I was some years older than you are when I married, and—and I don't wish to hurry you in such a matter, but I—I think something should be settled for your own sake as well as for Agnes's. What are your plans, Julian?"

Julian looked up, pale, bewildered, the sadness in his heart as plainly written on his face as it could well be.

What were his plans?

If he had answered the question honestly to his father, or even to himself, it is possible that that miracle of saving might have been wrought even at this eleventh hour.

"I have no very definite plans," he said, temporisingly. "My way is not clear to me at present."

"No, no, probably not—not to be expected," Joshua replied, hardly dissatisfied. "That was why I wished to see you this evening, Christmas Eve! Just the time when one feels inclined to see things made straight and pleasant. I hope next Christmas Eve will find you comfortably settled down here with your wife; and your mother and me comfortably settled at Elm House. I think of buying it, Julian; I set my heart on that house when I was quite a lad, and it has never been in the market since. I should like to die with fields and green trees all about me; I have always felt that. It will not cause me much pain to make a change that I have always looked forward to."

Julian's irresponsiveness had drawn the old man into soliloquy quite unawares. This was not at all the line he had intended to take. He had meant to be somewhat stern and more decisive in the beginning, to make his son to feel for a time that his conduct of late had perilled his position. This done, he would unbend by degrees. Everything was arranged. The climax was to be one of the most effective points in Joshua Serlcote's history.

But his own nervousness and Julian's impassiveness had frustrated his plans altogether. He had surrendered without either demand or entreaty.

Once—it was just at this moment—that prodigal son of his was strangely near to confessing all that he had to confess. It was not pride that kept him back, nor hardness. There had never been anything either proud or hard about Julian Serlcote, and, now that he was broken both in health and spirit, strength of impulse might at any moment have done the work that he should have had strength of soul for. His father's tremulousness had touched him, but at the same time it made him hesitate to strike so deep a blow as disclosure of the whole truth would inevitably inflict.

There is a superstition, beautiful enough, if one thinks of it, that an angel passes wherever

there is silence. The angel that watched the silence of Joshua Serlcote and his son must have passed away in tears.

"I shall take these things with me," said Joshua, glancing at the furniture. "I shall like to have them about me, and you will like to have new ones. I should say you might begin looking out for them any time. One can always get a thing cheaper and better when one isn't exactly wanting it. You will have to do things as cheaply as you can, Julian. Those alterations were a terrible business, and old Robertson wants a long price for Elm House. Two thousand five hundred, he says, but I can't give that; it's impossible. Much as I want the place, I don't think it will be possible for me to give more than two thousand pounds for it. Yet I don't know, I don't know. I *should* like to have it. I may offer another hundred, perhaps a hundred and fifty."

Julian almost shivered at the remembrance of the words that had been well-nigh on his lips.

No other angel passed that way; there was no more still silence.

"So far as your own future is concerned—your immediate future, I mean," the old man went on, "I have come to a decision that I think will satisfy you. Remember that I have your sisters to think of and your two younger brothers. But what is it, Julian? what is the matter? Are you not well? Is it possible that you can't lend me your attention for half an hour, sir? that you can't even *feign* an interest in a matter so important to yourself as this?"

Julian's absence of mind had forced itself vexatiously upon his father's notice at last. Joshua was astounded on perceiving that his son was not even listening.

"What is it I demand?" he said, in tones that might have been imperious but for the broken quiver natural to his age. "What are you thinking of? What do you require? Have I not forgotten and forgiven more than any human being save yourself has dreamed of? Have I not planned for you and taken thought for you—who have never taken thought for yourself—when I should have been sleeping? Have I not brought you here to-night for the very purpose of telling you of the sacrifices that I am about to make for you? And how are you treating me? Where is your gratitude? One would have thought that a sense of the common civility due from one human being to another would have prevented you from behaving in this way. What do you mean, sir? You have not uttered a single word of agreement in anything that I have said."

Julian was still calm, calmer than before, and even more despairing. Nothing that he might do or leave undone, say or leave unsaid, could make much difference now.

"I have not spoken because I did not wish to vex you," he said, in the soft, sympathetic voice that always moved his father. "And there was another reason, I did not wish to imply anything that might—that might not be true."

"Quite right, quite right! But I do not understand you in the least. Speak out and speak

plainly. Nothing that you can say will annoy me as your indifference has annoyed me."

"It was not indifference, quite the reverse. I was thinking of something that will probably distress you; it distresses me, but I am doing it for the best, because I think it kindest and most honourable. It was my intention, it *is* my intention, to release Agnes from her engagement this evening."

Julian spoke firmly, and looked up firmly to his father's face when he had finished speaking.

will disinherit you before I sleep, unless you recall the word you said just now. Will you do this, or will you not?"

"I cannot do it."

"Then neither can I unsay what I have said. You will leave my house to-night. I will not sleep under the same roof again with such a dastard as I now know you to be."

Joshua knew that these last words had been heard by ears they were not intended for. Julian knew it too. They had seen Agnes enter the



"THEN YOU SHALL LEAVE MY HOUSE THIS EVENING," HE SAID, RISING TO HIS FEET.

He long remembered that moment—the sudden crimson that spread over the old man's countenance and under his white hair, the fierce light that shot from his keen eyes, the strange twitching of the muscles about his mouth as he spoke.

"Then you shall leave my house this evening," he said, rising to his feet, speaking with passionate vehemence, "and I will destroy my will this evening, and I will look my last upon your face this evening."

Julian rose too, pallid, rigid, silent.

"I suppose this has been brought about by that woman who lives in the Grove," Joshua resumed, with the same uncontrolled violence of tone and manner. "I have heard of her, and I have heard of you. I know more than you think. But believe me or not as you choose, I mean what I say. I

room, pale, wondering, tremulous; but Joshua had not refrained from expressing his decision.

Julian had nothing to gain by hesitancy, or by concealment of his intention towards Agnes.

"You have heard what my father has said," he began, turning to her. "He has not spoken without reason. I had told him that I meant to ask you to consider yourself free from the engagement that has existed between us. I think you will not be so much surprised as he appears to be. The time is not far distant when you will be grateful. There is more that might be said, but I cannot say it now. I can only say 'Good-bye.' Forgive me, Agnes, and forget me."

He held out his hand, and she gave him hers mechanically, not knowing the thing that she did, not attaching meaning to the words that she

heard. She was unused to scenes like this. It could not be that either her uncle or Julian was in earnest. People often said things in anger that were not intended to be taken literally. She was still looking on in the same uncomprehending way. Julian turned sadly from her to his father, holding out his hand again.

"Will you shake hands with me, father?"

"Never; never while you live, unless you undo the deed you have done to-day."

Joshua Serlcote stood there, erect in his pride and his anger, stricken in heart with a yet unrealised disappointment, and only half-conscious of the import of what had been said and done. It is probable that he was as far as Agnes was from believing in any finiteness of result likely to follow this quarrel with his son; but he was a man who prided himself on keeping his word. It was for Julian to consider the consequences.

Julian had already left the house; just as he stood he had gone, snatching his hat from the peg as he went rapidly through the passage, turning neither to the right nor to the left. His father's refusal to shake hands with him had struck him hardly; dead as he was to feeling of almost every kind, he yet felt this.

The angry flush of colour died rapidly from the old man's face after the sound of the closing door had fallen upon his ear. He sat down, pale, bewildered, stunned. The suddenness, the unexpectedness of this conclusion to the long-deferred interview with his son was overwhelming. He put out his thin nervous-looking hand as Agnes went up to him with a gesture that was unspeakably touching. It felt very chill and lifeless, and Agnes took it between her own two warm ones and held it comfortingly. It was a little ease to herself.

Joshua watched her as she sat on a low stool at his feet, betraying her suffering only by her silence. She looked up at him once trying to smile, but the expression that was on her simple innocent face would have suited tears better.

"Never mind, my child; never mind," he said, laying one hand tenderly upon her head. "You are young, very young, you will get over it; and I—I—"

"And you will get over it too," she said, softly, and believing the word she said. "We shall all get over it. Julian will come back, I know he will come back; and you will forgive him. Say that you will forgive him; I shall feel happier if you will say it."

"I cannot say it, I cannot say it," the old man replied with agitation. "I have forgiven so much, more than you know of, more than I can tell you. Forgive! How can we forgive a person who doesn't even desire forgiveness, who goes on sinning against one, time after time? How oft shall I forgive him?"

Agnes looked up quickly; she felt that her uncle was not intending to ask the question as Peter asked it, yet surely the reply that was made to Peter might also be made to him. "What was meant," she gently asked, by "'seventy times seven'?"

Joshua hesitated awhile. Agnes's presence,

her voice, the fact that she was pleading for one who had tried her heart's strength to the very uttermost—these things were tending more forcibly than he was aware of to prevent that hardening of himself against his son that he had meditated.

"I suppose that forgiveness without limit was meant," he said, thoughtfully. "But it is a hard saying—until to-night I never knew how hard."

"Yet not impossible?"

"Perhaps not. If it is not impossible to you it certainly ought not to be to me. But of what use is forgiveness? It is too late. He took advantage of me. He stung me into anger, and then took me at my word almost before it had left my lips. If he says that I turned him to the door, I can only say from the bottom of my heart that I believe he wanted to go. Agnes, where is he gone? Do you think he *will* come back? You said just now you thought so; what made you say so?"

Already change was stealing upon him, resistlessly, pitifully. His son had had temptations, unusual temptations, he acknowledged to himself; and perhaps there were others who had been more to blame than he had been. He could not talk to Agnes of Mrs. Talbot, but he thought about her a good deal; and knowing no other cause of Julian's conduct this evening he attributed all to her. The boy was infatuated, he could in a measure understand that, he could even understand that such an infatuation should for a time seem stronger than the purer and holier and more natural love that ought to have been all sufficient for him, that doubtless would have been sufficient but for the wiles and arts of a woman who could find no more congenial pastime than trifling with human affection.

Joshua Serlcote was not far from the truth here; he saw further and more clearly than Julian himself had seen.

Of late, as we know, other troubles had beset Julian, beset him so grievously that his love for Agnes, his foolish and absurd fancy for Helena Talbot, had alike remained in abeyance. The latter had flared up a little wildly now and then, more especially in Mrs. Talbot's presence. There had been something about her condescension that touched more than his vanity; and more than his vanity had been wounded by that change in her on the evening when Dr. Sargent so unexpectedly came upon the scene. He had not seen her since—hardly a week had passed—but he had not troubled himself about her so much as might have been expected. He had surprised himself in this—what capacity he had for suffering, and it was not a little had been claimed by other and more momentous matters.

Of all this Agnes knew nothing. She could have borne to know better than she bore the conjecture. The hints that Julian had dropped were very pregnant for her, and afforded a vast field for sad imagining. Let it be remembered that she was only a woman, and a very young one, and that her experience of life had been of the simplest. She was not even "clever," in the modern sense of the word. Girls of her age

sometimes startle one nowadays with their gifts of speculation, their large tolerance, their knowledge of the world and its ways, and their surface acquaintance with the cheaper philosophies; but Agnes had not reached even the first stage of "emancipation." For her sin was sin, and sorrow was sorrow, and love was love. Life seemed to be made up of these three things, and they were so interwoven with each other now as

to appear almost one. She sat there silently at her uncle's feet, thinking, wondering, yearning, suffering—suffering, only God knew how intensely. She could make no cry, not even a secret one for her own relief. It was not resignation that was in her soul, that she knew; resignation might come later. At present nothing save this utter aching silence seemed in any way possible.

RAILWAY NOTES IN THE NORTH-WEST;

OR, DOMINION OF CANADA.

BY THE REV. HARRY JONES, M.A.

II.—MONTREAL—OTTAWA.



O return to Montreal, whence I write. It is finely placed, though somewhat more

smoky than I expected, and with provokingly bare and weedy plots among the houses towards the outskirts of the town. Its population is not so French as that of Quebec, but the old Gallic ownership has left stubborn marks. For instance, when I went for a walk over the Royal Mount which gives its name to the place, and shows the city, river, and plains in one grand view, I asked my way thrice. Each time my question was rejected with a shrug, and I had to put it in French before receiving an answer. This indicates not only a very conservative adherence to national traditions, but a considerable amount of what I might call obstinate isolation. These people, anyhow, had either found enough of their own race and tongue to be independent of English society, or had affected not to understand me. I feel persuaded

however, that their failure to reply arose from sheer ignorance. The shrugs were genuine. They did not know enough English either to apprehend what I said, answer my question, or state their inability to do so. They only shrugged their shoulders at me as if I had been a Chinaman. This severance (although they are loyal citizens) is naturally much deprecated by the present masters of the country. I happened to fall into conversation with a gentleman from Toronto, and when he praised his own city remarked, "It is a pity that you have no Royal Mount there from which to look down on it." "Ay," he replied, "but we have no French."

Many of these live in the poorest parts of Montreal, and, with some Irish, form that stratum in the community which is the object of much unquestioning and too often disappointing liberality. Most of the charitable institutions here are naturally Roman Catholic, but I especially noticed one which announced on its outside that it was devoted to the care of "Protestant Infants." Poor little ticketed things! There were two or three crowing at an open window close by on the ground floor, and if I had been the Pope himself they would have accepted my stick of barley-sugar with unhesitating acclamation.

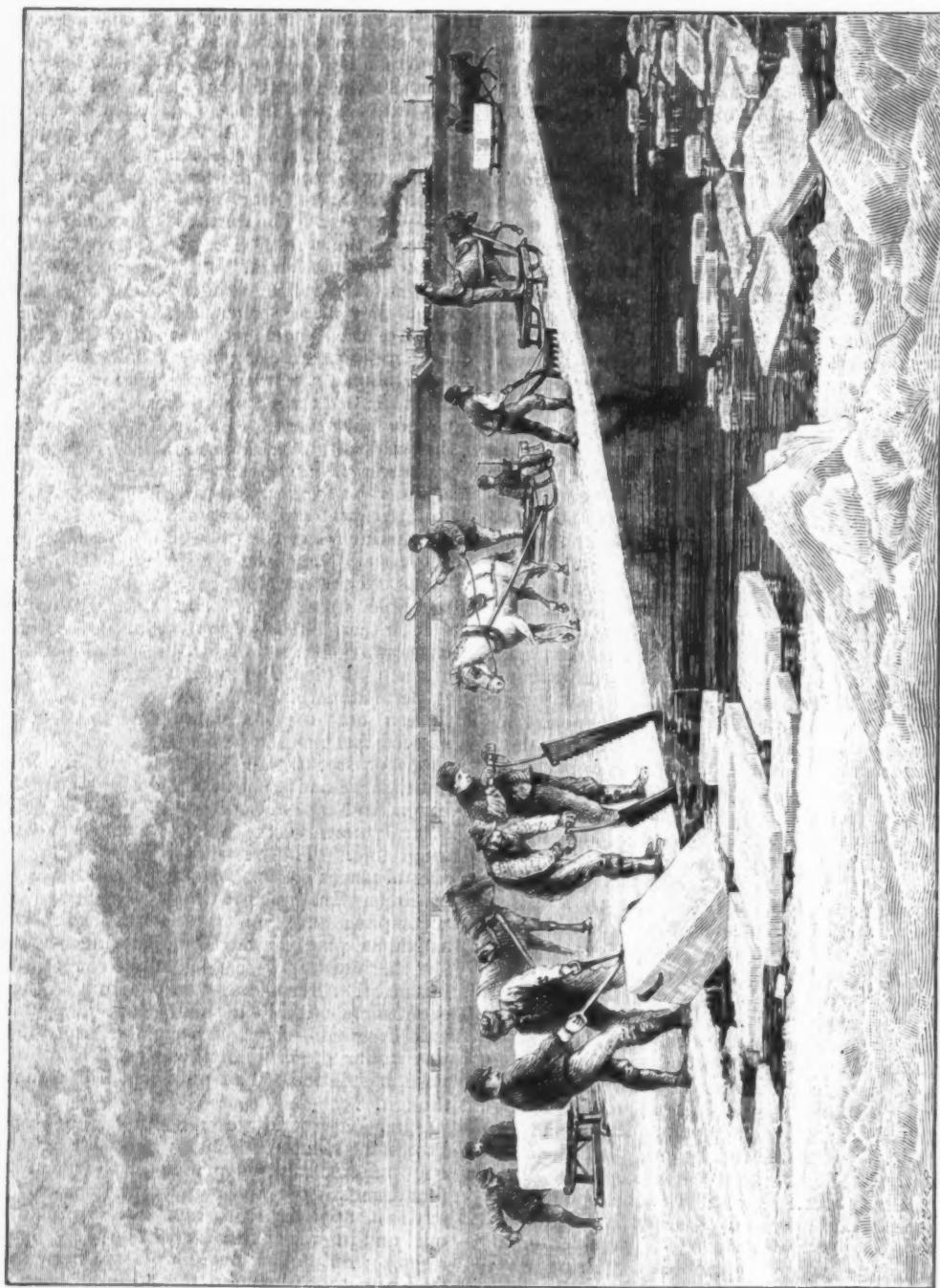
Since I am visiting Montreal as a member of the British Association, which is most generously welcomed, I share the hospitality which they receive, being most agreeably lodged in the hospitable house of the Hon. Donald A. Smith, who, as last chairman of the former Hudson's Bay Company, was a chief instrument in the transfer of its authority to the Dominion, and was subsequently with Colonel Wolseley in the business of the Red River Rebellion. Thus I hear much at first hand of the most weighty changes in Canada, and am, as it were, resting in the cradle of its newborn history.

I have, though, naturally been anxious during some pause in this gay time of science and luxury to see the poorer parts of the town. That there are such appears from, say, the dirty beggar-woman, with her wan-faced advertisement of a

child sitting on the low wall in Nôtre Dame Place. I have had talks with experienced and intelligent men who have much to do with the poor. There is distinctly much less drunkenness in Montreal than in London, though a few dock labourers may drink more here than they do there, simply because they earn more. Directly the winter stops their dock work, though they might easily find other employment some way out of town, some beg, and are provided with food and warmed rooms. Otherwise they would be frozen as hard as boards, and the good people of Montreal would not like this. They do not wish to be the last direct agents in thus applying the sentence, "If any man will not work, neither shall he eat." So they feed these lazy drunkards. I find, on repeated inquiry, that if a dock labourer can handle an axe he may in the winter earn twenty dollars a month, with board and lodging, at "lumbering," *i.e.*, chiefly cutting trees down in the forests ready for the spring freshets to float down to the saw-mills. If he is not expert enough at this, he can get employment in tending cattle, under shelter, for farmers, within accessible distance, at ten dollars a month, in addition to board and lodging. But he sometimes prefers the charity of Montreal. I have not, however, confined my inquiries to those who know about the poorest class, but give the result of an expedition of several hours which I have made, under the kind guidance of Canon Ellegood, to some of the meanest places in Montreal. He has been more than thirty years in this city, and knows its pastoral and sanitary ins and outs as well as or better than most. He took great interest in my inquiries which I made pencil in hand. Genuine slums are found here, but they are not nearly so thick as in some parts of London. We paid a good many visits, though I do not record them all. Our first was to Mrs. S—, in a back yard. Husband works for the "corporation"—*i.e.*, what we should call "parish." Earns, when in work, equivalent to 24s. a week. Rent a little over 4s. a week. Seven children. Three small rooms. Mr. M—, 5s. a week, much the same story. Mr. D—, uncertain occupation; crippled. Wife does charring. Several children. Four rooms. Stagnant water under floor. Been to the health officer. He came three weeks ago; not been since. Nothing done. Pays 7s. a week rent, and small water rate. Had to do a lot of his own papering and plastering to make the rooms decent. Has hired his rooms by the year. Pays 10d. for a 4 lb. loaf. (We tested this by going into the shop round the corner, asking the price, and having the loaf weighed. I found that he bought the best bread. The cost of seconds in relation to the first was as three to four.) Vegetables—now what did he pay for vegetables? "Bring what you have just bought," cried he to his wife. She produced four moderately sized Swedish and two small white turnips. "We got these," said she, "from a countryman in the street, for seven cents"—*i.e.*, 3½d. "Would have had to pay twice as much at a store"—*i.e.*, shop. "Fish now?" "Oh, missus, bring those haddocks. We

paid thirty-five cents—*i.e.*, 1s. 5½d.—for them this morning." They were two small fish. "What do you pay for meat?" "Well, the best is fifteen cents—*i.e.*, 7½d. a pound; coarser, not more than 6d." Potatoes, 1s. a bushel. Paraffin, for lamp, 1s. a gallon. Coals, what were they? About half-a-crown a hundredweight now—in summer; bituminous a little dearer than anthracite. This is a very heavy price. Butter? Twenty-five cents—*i.e.*, 1s. per pound. The Canon, who was watching and checking all these answers, said he paid twenty-two cents for the best. Bacon, 5d. to 6d. a pound. Suit of working clothes about ten dollars—*i.e.*, £2. The dustbin is generally emptied twice in the week. The drains were bad, and "got into his brain." Lodgers? Didn't have any, but might have as many as he pleased, provided they were "reputable." What were the rents of the tenements above his? "Well, the lady in the next floor paid six dollars a month"—*i.e.*, about 6s. a week, and a small water rate. I think she had three small rooms. "But," said he, "rents have risen." Canon Ellegood confirmed this, and said we had seen and interviewed representatives of the poorest classes, but that skilled artisans got from two to three dollars a day. The children (who are now at the tail of their holidays, which last two months) were often dirty, but less so than those of a similar class in English towns. I saw no genuine specimen of the irrepressible street boy. The Montreal urchin is quieter than his London cousin. Of course, he has some disputes over dirt-pies, and paddles in unclean puddles. But as far as I can see, he plays at neither marbles, top, cat, nor chuck-farthing; though some toss balls aimlessly and feebly. I noticed that the first woman we called on had no shoes or stockings. No more had Mr. D—; but then he had no feet. They had been frost-bitten, and cut off. I need not give the result of several more visits; they produced about the same tale. The first impression produced in several places on Mr. Brooke Lambert, the Vicar of Greenwich, and a keen social inquirer (who accompanied me), and myself was that they were as bad as some we were familiar with in London. But the interiors were decidedly cleaner in most instances. After a long bout of visitation, we had each some milk in a small shop. For this we paid five cents—*i.e.*, 2½d. per glass. But the glass was rather larger than those used for the purpose in London. The milk had been skimmed, though.

After our round we went to "The Montreal Protestant House of Industry and Refuge." Here one hundred and fifty men and women were found, mostly old and permanent inmates. But any man applying for a meal was supplied with one, and in winter there would be three hundred sleeping on the premises. We spoke to several from Bristol, Manchester, and elsewhere, who were still quite at sea. They were helpless sort of fellows, and the bright matron who went round with us and talked very audibly and freely about the inmates before their faces complained of such immigrants. She gave them, in one sense indirectly, for she did not address them, but ourselves, a "bit



ICE CUTTING ON THE ST. LAWRENCE.

of her mind." And it was a very sensible kindly mind too. Some in the house were obviously of weak intellect, but several were most unmistakable "cadgers." I have not been chairman of a large East London Charity Organisation committee for ten years without being able to spot these gentlemen. This institution is the only Protestant one in Montreal which relieves men. Some others help women and children. All are supported by voluntary contributions or managed by volunteers, there being no poor-law here. I have already noticed that the Roman Catholics have their own philanthropical machinery, which is extensive, and, like other good work of the same sort, helps to breed pauperism. The internal condition of the Canadian towns does not, however, measure the produce and possibilities of the Dominion. Its energy is not focussed in cities, but is mostly operative in the field, plain, and forest.

I ought, though, in referring to Canadian energy, to note one special phase of it, and must mention the spirited conduct of the Montreal newspapers. They give the proceedings of the Association at great length, along with news and comments of local, colonial, and European interest. Many parties are being given in the afternoons and evenings. The Governor-General held a reception the other night at the M'Gill College, and smilingly shook hands about a thousand times.

Though a detailed account of our doings is suited only to current scientific journals, or elaborate final "reports," I cannot refrain from noticing a few phases in the procedure of the Association which have a wider and more popular interest than the "papers" which were read. The municipal authorities welcomed their English kinsmen in the Queen's Hall, which holds about 1,200 people, and was well filled. The mayor (a short and smiling Frenchman in spectacles, heavily chained) read a well-written English address with laudable conscientiousness and very successful leaps over some ugly-looking verbal fences. Then, after a reply by Sir William Thompson, who represented the retiring president, Mr. Mayor, with a strong foreign accent and terse cordiality, called on the great assemblage for "God Save the Queen." It was sung with a universal heartiness which instantly set upon the mind a deep impression of Canadian loyalty. This was, if possible, deepened in the evening, when the hall was again packed tight with a panting and patient crowd which watched for the faintest references to the radical relationship between Canada and England, and applauded them rapturously. The President, for lack of time, was unable to read the whole of his paper. His address was well received, and a short concluding reference he made to the inevitable difficulty which a purely scientific worker feels when he attempts to break into the higher mysteries of being with the tools of calculation and experiment was warmly appreciated. Lord Lansdowne made an excellent speech. It not merely touched the leading thoughts of those present with neatness, but was marked throughout by a generous, statesmanlike, and thoughtful cordiality. A

French gentleman (I call him French, though he was a British citizen) delivered himself at great length, being unwisely cheered when he showed signs of pulling up. The audience were determined to have it supposed that he was perfectly understood by all. So he was by many natives, Montreal being half French; but I question if the crowd of "scientists" who clapped till their palms tingled were quite so clear in their minds about the details of his utterance.

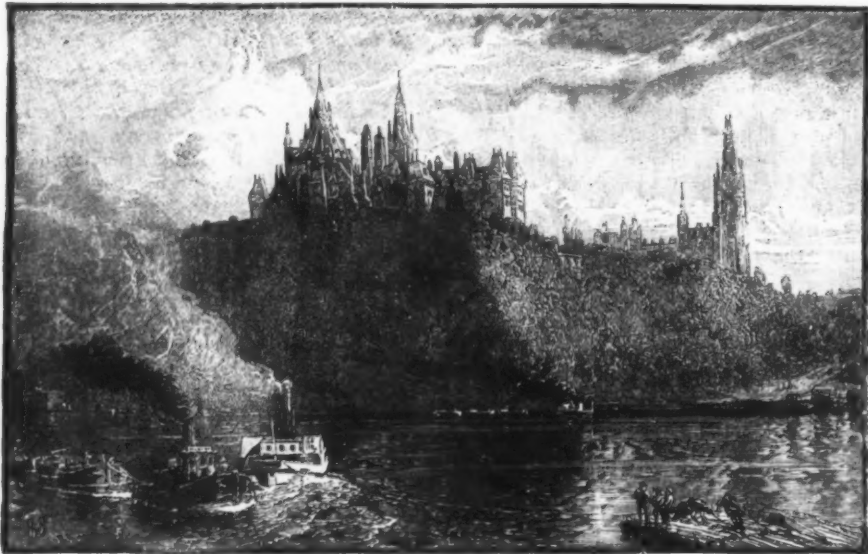
Montreal is a place of about 180,000 people. Its streets are spacious and furnished with good shops, nearly all of which have their signs or names sticking out. The cabs are made to open if necessary, and are well served. The hoardings invite the passer-by to purchase "Reckitt's Blue," "Stephens' inks for hot weather," and "Nestle's infant food." Carts go round and drop blocks of ice at every door. The French language sounds in the air and shows itself over shops. Spires and towers are numerous. I believe that this is called the "City of Churches." Swarthy Roman priests in spectacles, tall hats, and cassocks walk about the streets. Anglican parsons, in very correct clerical suits, wear mostly black wideawakes. Many elegantly dressed ladies drive about and illustrate the latest advance in the science of fashionable adornment. The principal public edifices are as big and solid as the Mansion House. Policemen are equipped with flat caps and blue serge sacks. They carry their *bâtons* in their hands, at the risk of lowering the influence of their moral force.

Ottawa, August 30, 1884.

This is a city of palaces and timber-yards. The Houses of Parliament are apparently big enough for the "Dominion" over the earth. They are equipped with an excellent library of 110,000 volumes, and being set upon a hill are seen from afar. I noticed that there were no "cross benches," and on asking whether any members of the Dominion Parliament had independent views, was answered in the negative. Anyhow, their places of deliberation, furnished with large galleries, wherefrom public opinion may be immediately gathered, are importunately big. But, in their way, the sawmills are bigger. Huge trunks of trees come floating lazily down the Ottawa and its affluents for hundreds of miles till they reach a row of monsters, full of greedy teeth within, which straddle over the current. Here the trunks, all slippery and dripping, are caught up at one end of a shed and issue from the other, literally within a few minutes, in such finished planks as you might buy from a carpenter at Notting Hill. The way in which a great log, ten feet or twelve feet round, is hoisted fresh from the water, laid upon a truck, pinned rigidly down in an instant, and then, suddenly, by means of a great whirling saw, finds one side of himself as flat as a wall, is almost truculent. You expect him to cry out. But he is sliced up before he has time to think. I saw one of the smaller trunks cut into eight three-inch twenty-one-foot planks in seven seconds. In a very few minutes more these were trimmed and thrust out into the building world; so far ready for use. Large and small

trees are disposed of at an equal rate. Some half-dozen mouths in a row, within one shed, keep gobbling them up at the same time and sending them out in clean deal boards without any appearance of chips, sawdust, or rounded outside slabs. These all disappear rapidly through holes in the floor, and no litter accompanies the neat procession of planks which make their appearance at the land end of the shed, and are rapidly carried off in trucks.

I date from Ottawa, as the Association is having a Saturday holiday, and a number of us have been most hospitably entertained here. First we had an address, written by the Bishop of Ontario, whom I shortly conversed with afterwards, and who was legitimately enjoying the consciousness of having taken a prominent part in the invitation of the British visitors to the metropolis of the Dominion. We have a special train in attendance, carriages to drive about in while here, and



PARLIAMENT BUILDINGS, OTTAWA.

The accumulation of "deals" at Ottawa is of course enormous. When you look down from the terrace behind the Houses of Parliament the river banks far inland are seen to be brown with square stacks of prepared timber awaiting export. And much of the water is like Alderney cream. That is from the sawdust which is whirled down into the river from the mills. When a steamer traverses these yellow plains their more appropriate resemblance to wood recurs, for the sheets of spray spring from her bows like coils of shavings from a plane.

I do not offer any description of the city, nor dwell upon the influences which caused it to be chosen as the capital; nor do I venture to define the political constitution of the Dominion. Are not these things written in books of reference? Of course Montreal, Quebec, and Toronto each wished the seat of Government to be placed within itself. Thus the Home authorities took a pair of compasses, and finding roughly the centre of that which had been reckoned as Canada, built the houses of the Legislature at this hitherto almost obscure place. When the newly-opened North-West territories are as fully peopled as the old provinces the present arrangement will be obviously lopsided. Measurement would then point to Winnipeg as the middle city.

have been feasted at a grand spread, with a gilt menu, at the "Russell." A crowd waits at the station to see us off. The sky flutters with a forest of British flags, and the band is putting trumpet to mouth that we may hear "God save the Queen" as we steam slowly away in a tumult of cheers.

September 3rd.—I have been favoured with an invitation to join the select party of the British Association which starts for the summit of the Rocky Mountains to-morrow. This sets one smartly to work to gather up loose ends and realise that the rush of scientific and sumptuary provision is coming to a sudden end. But we have two or three more gatherings, and an army of importunate carpenters have been summoned by our too hospitable host to "rush up" (that, I believe, is the correct Canadian term) a spacious addition to his already roomy house in order to entertain some hundred and fifty extra guests to-night. The party going to the "Rockies" will have a special train, be well cared for, and find facilities for visiting those spots in the prairie which will enable us best to form an opinion about the condition and prospects of settlers in the North-West. Meanwhile the work of the Association draws to an end. It has been in one sense very successful, but the social side of it would

seem to be as attractive as the "spectrum analysis." In fact, the making of the Atlantic as nothing, the extension of Albemarle Street to the Pacific Ocean, and the very short time in which it is now possible so to extend it, marks an "advance of science" which, when realised, swallows up smaller performances, strides over shorter steps, and leaves an impression on thousands beyond the circle in which the British Association is mostly honoured. Such a gathering, moreover, as we have had at Montreal emphasises the progress which is being made in the realisation of Greater Britain. The better knowledge of one another by Englishmen beyond the seas and at home is no unfit phase of "science." This meeting helps to show that social as well as scientific sympathy, when appealed to on a large scale, over huge areas, is easier than many think. That which some held to be impossible in respect to the gathering here is now so far a thing of the past as to have been done; but I shall be greatly surprised if it does not set up a fresh action of fellowship with colonies of Englishmen, and

become the mother of manifold meetings between such bodies as were supposed to have become inevitably separated, however strong old ties may have been. Indeed, the project of holding a gathering at Melbourne is already being unofficially discussed. One of our moving spirits (or bodies) has asked me if I would, all well, be willing to attend a meeting in Australia.

At the final assemblage in the Queen's Hall, when several honorary degrees were conferred on vice-presidents and distinguished visitors, the steam of loyalty was not seen to have been evaporated in the least, and their sense of union was, perhaps, even more distinctly realised in the parting words of the speakers. There was a great interchange of kindly farewells. Then bags and boxes were soon seen to be crowding the fragile-looking Montreal cabs, and the trains began taking visitors off towards the uttermost parts of the earth, including eventually Australia. They will be sealed with some more American impressions before they reach home, but the "breaking-up" has come, and the college servants will soon



LUMBERERS AT WORK.

wash off the staring paper notices which the bill-stickers have put up to guide us from section to section.

I am not yet in a position to know what peculiarly new light has been shed upon science during the meeting. Indeed, it may be doubted in these days (when a fresh discovery, a new view of an old one, or a reasonable conclusion that has been reached, is immediately published) whether any wholly original or unexpected revelation can be made at these meetings. A man may possibly bottle his notions up and keep them dark till they can be uncorked in a "section" of the British Association. This, however, is, it seems, not usual, nor easy, but I am told that a curiously suggestive inner door has been indicated or opened into the past by an American, Mr. Cushing, whose name may be known to some of my readers as the contributor of some interesting articles to "Harper's Magazine." He is a singular-looking man, slight, youngish, with a dreamy eye and a far-off mystic gaze. He has been living with ancient New Mexican Indians for five years—as one of them—and has been initiated as a priest in their tribe. Being at the same time an antiquary and keen anthropologist, he has given evidence which experts recognise as probably connecting some ornamentation of the oldest classic sort or pattern with the cavemen, through Indians of New Mexico who have preserved (or not destroyed) relics of manufacture dating from the dimmest past. A faint connecting thread may eventually come to be established between ancient Greece itself and those widespread cavemen who carved their tools with spirited delineations of the animals of their time, and hunted the woolly rhinoceros. Mr. Boyd Dawkins is keenly awake to this possible opening of or pointing to a door of history which may reveal fresh human vistas into the remote past.

Of course, the grave procedure and sometimes ponderous performance of the week has been lit by sparks of scientific fun. Many were puzzled to know whether they should laugh or not when a "cablegram" came from Australia saying that the *Ornithorhynchus paradoxus* had laid an egg. But unhesitating smiles pervaded the anxious faces of "scientists" on the receipt of a communication from a member who had reached and "wired" from the North Pole. "Found a Scotsman in charge. Says his name is Thomson. Please forward buns. Bears getting troublesome." I dare say that this is an old joke, but then old jokes are sometimes better than new. One function which has been observed for several years has not been omitted at this gathering—I mean the "Lion Dinner." It is a deliberate taking of the wits out of severely scientific harness, and a laying-down of the reins upon their necks, which results in a banquet with humorous circumstances and speeches. But this play of the philosophers cannot be reproduced in cold blood and black ink. The flavour of the thing would wholly disappear.

Having spent a Sunday here, and finding the air quite silent so far as the forest of church spires and towers which mark Montreal are concerned, I asked a native whether they had any bells. "Plenty," said he, "but we hang them on our engines, not in our church towers." This is true enough. Each locomotive has a huge bell which tolls steadily as the bare train moves down the city street, or sets out from the station—like a funeral. My acquaintance added, "These and the ships' horns are enough for us." So the churches opened as silently as theatres, and I, for one, cannot see why the use of town bells, especially those in London, should not be at least lessened. In some poor crowded districts the harsh jangling of a solitary church kettle for half an hour before morning service is enough to get the parson heartily cursed by the weary men who are seeking some little repose upon the day of rest.

Of course there are no "chapels" here. I went with my good host in the morning to "St. Paul's Church." Organ, painted windows, congregation kneeling, or supposed to be so, during prayers, and standing to sing. Sermon preached from a manuscript. Outside were divers crosses; stone, and those of that partly gilt metal which peculiarly marks Roman Catholic churches. And this was a Presbyterian place of worship. I preached in the evening at St. James's, where the service is helped by an excellent surpliced choir and antiphonal organ, well played. It is dangerous to generalise, and I find myself on thin ice (though it is mostly three feet thick at Montreal) in setting down impressions I have already received about the work of the English Church in Canada; yet I try to scrape as many brains as I can, besides looking about and listening for myself. There is here a far greater contrast between the position of the country and town clergyman than exists or can be realised in England. In such an old province as that of Quebec, where the majority of the population is intensely Roman Catholic, and both Presbyterians and Methodists are very powerful and active, the country clergyman with a scattered flock, who aims at anywise realising the position of a "parson" in the "old country," leads a life which in some senses, and to any educated man, must be a very trying one. A stream of them is thus they say setting towards the "North-West," of which English Canadian talk is full, and Roman Catholic authorities often step quickly in and occupy the places which have belonged to Anglicans. They "buy them out," to use the expression of an experienced Montreal rector to myself. I may here note that the French and Irish show little desire to invade the newly-opened prairie territories, but (having an inherited tendency to small penurious farming and the cultivation of unpromising soil) are creeping into those regions beyond the banks of the St. Lawrence which have hitherto been untouched.

THE HEALTH AND LONGEVITY OF THE JEWS.

BY P. KIRKPATRICK PICARD, M.D., M.R.C.S.

IN these days, when sanitation claims a large share of attention, and when questions relating to the public health are canvassed and discussed on all sides, it may be of service to ask what lessons are to be learned from the diet, habits, and customs of the Jews. It is not generally known that their health and longevity are superior to those of other races, a fact which has been noted by careful observers from early times in this and other countries. An experiment, extending over thousands of years, has been made as to the sanitary value of certain laws in the Mosaic code. The test has been applied in the most rigid way, and if it had failed at any period in their eventful history, their name alone, like that of the Assyrian and Babylonian, would have remained to testify to their existence as a nation. The three deadly enemies of mankind—war, famine, and pestilence—have at times been let loose upon them. They have stood firm as a rock against the crushing power of oppression, when exercised at the call of political or religious antipathy. They have been pursued with relentless persecution, from city to city, and from one country to another, in the name of our holy religion. Restricted as to their trade, singled out to bear the burden of special taxation, confined in the most miserable and unhealthy quarters of the towns where they were permitted to dwell, living in the constant fear of robbery without redress, of violence without succour, of poverty without relief, of assaults against their persons, honour, and religion without hope of protection; in spite of woe after woe coming upon them, like the waves of a pitiless sea, they have not been broken to pieces and swallowed up, leaving not a wreck behind. No other race has had the fiery trials that they have gone through, yet, like the three Hebrew youths in the furnace, the smell of fire is not found on them. To-day their bodily vigour is unequalled, and their moral and mental qualities are unsurpassed.

How has it happened that, after being compassed about for centuries with so many troubles, they have at the present time all the requisites that go to form a great nation, and are, in numbers, energy, and resources, on a level with their forefathers in the grandest period of their history? It is not enough to say that all this has come to pass according to the will of God, and that their continued existence is owing to His intervention on their behalf. No doubt it is a miracle in the sense that it is contrary to all human experience, for no other nation has lived through such perilous times of hardship and privation. But as it was in the wilderness so it has been in all their wanderings down the stream of time; the miracle was supplemented by the use of means, without which God's purpose regarding them would have failed. The blessing of long life and health, pro-

mised to them by the mouth of Moses, has not been withheld. Several texts might be quoted, but one will suffice. In Deuteronomy iv. 40, we read, "Thou shalt keep therefore his statutes, and his commandments, that it may go well with thee, and with thy children after thee, and that thou mayest prolong thy days upon the earth, which the Lord thy God giveth thee, for ever." With a promise so rich with blessing, conditional on their obedience, they have through all the ages been monuments of God's faithfulness, and are to this day in the enjoyment of its advantages.

The following statistics, for which I am indebted to the kindness of Dr. A. Cohen, who has collected them from different sources, will serve to prove their superiority in respect of health and longevity. In the town of Fürth, according to Mayer, the average duration of life amongst the Christians was 26 years, and amongst the Jews 37 years. During the first five years of childhood the Christian death-rate was 14 per cent. and the Jewish was 10 per cent. The same proportion of deaths, it is said, exists in London. Neufville has found that in Frankfort the Jews live eleven years longer than the Christians, and that of those who reach the age of 70 years 13 are Christians and 27 are Jews. In Prussia, from 1822 to 1840, it has been ascertained that the Jewish population increased by $3\frac{1}{2}$ per cent. more than the Christian, there being 1 birth in 28 of the Jews to 1 in 25 of the Christians, and 1 death in 40 of the Jews to 1 in 34 of the Christians.

These data are sufficient to verify the statement that the Jews are endowed with better health and greater longevity than Christians. It will therefore be inferred that some peculiarity exists which gives them more power of resisting disease, and renders them less susceptible to its influence. In virtue of this property their constitution readily accommodates itself to the demands of a climate which may be too severe for other non-indigenous races. Take as an example the statistics of the town of Algiers in 1856. Crebassa gives the following particulars—Of Europeans there were 1,234 births and 1,553 deaths; of Mussulmans 331 births and 514 deaths; of Jews 211 births and 187 deaths. These numbers afford a remarkable illustration of the "survival of the fittest."

Their unusual freedom from disease of particular kinds has been often noticed, and amounts nearly to immunity from certain prevalent maladies, such as those of the scrofulous and tuberculous type, which are answerable for about a fifth of the total mortality. Their comparative safety in the midst of destructive epidemics has often been the subject of comment, and was formerly used as evidence against them, on the malicious charge of disseminating disease. At the present day, and in consonance with the spirit of the age, the matter has come within the scope of the

scientific inquirer, with the view of ascertaining the cause of this exceptional condition.

A peculiarity of this sort must lie in the nature of things in the distinctive character of their food, habits, and customs. Their more or less strict adherence to the requirements of the Mosaic law, and to the interpretation of it given in the Talmud, are familiar to all who come in contact with them. To this code we must therefore look for an explanation of the facts under review; and here it may be stated that no prominence is given to one set of laws over another. They all begin with the formula, "And the Lord spake unto Moses, saying," thus making no difference in point of importance between the laws of worship and those of health. These latter, therefore, carried with them the sanctions of religion, and were as much a matter of obligation as any other religious duty. It will thus be easily seen how the interweaving of the several laws relating to health and worship had the effect of giving equal permanence to both, so that as long as the one was observed the other would be in force. Though many of the details might appear arbitrary, a fuller knowledge of sanitary science has revealed a meaning not recorded in the sacred text. Moses, who was versed in all the learning of the Egyptians, was evidently acquainted with the laws of health, which he embodied in his code under divine direction. Those who are firm believers in the inspiration of the Scriptures will have no difficulty in believing that principles, given by God for the preservation of the health of the Israelite in olden times, and to which he is still obedient with great apparent benefit, are likely to be beneficial in their effect on the general community. Truths of this kind are like the laws of nature, universally applicable. They never grow old by lapse of time or effete by force of circumstances.

This part of the Mosaic code is mainly concerned with details relating to food, cleanliness, the prevention of disease, and the disinfection of diseased persons and things. The Jews observe in eating flesh-food the great primary law, which was given to Noah after the Flood (Gen. ix. 4): "But the flesh with the life thereof, which is the blood thereof, shall ye not eat." It was enforced in the Mosaic dispensation (Lev. xvii. 10), under the penalty of being cut off for disobedience, and in the Christian era was confirmed at the Council of Jerusalem (Acts xv. 20), when the Apostle James, as president, gave sentence that the Gentiles who are turned to God should abstain from blood. To this day the animal (whether beast or bird) is killed with a sharp knife in such a way that the large bloodvessels in the neck discharge the blood most freely, and so drain the flesh to the utmost extent possible, and as an additional precaution the veins, which in certain places are difficult to empty, are removed before the part can be used as food; so that it would appear every needful measure is adopted to prevent the ingestion of the forbidden fluid. On this account game that is shot is not eaten by the orthodox Jew, as the blood is retained by that mode of death.

Before the slain animal is pronounced kosher,

or fit for food, a careful search is made by experts for any evidence of disease. These men have to satisfy the Shechita Board, which takes cognisance of these matters, that they have a competent knowledge of morbid structures before being authorised to affix the official seal, without which no meat is considered wholesome. That this practice is far from being unnecessary may be gathered from the fact that in a recent half-yearly report presented to the board the following particulars occur:—Oxen slain, 12,473, kosher, 7,649; calves slain, 2,146, kosher, 1,569; sheep slain, 23,022, kosher, 14,580. These numbers show that out of 37 beasts slain 14 were rejected as unsound, and not allowed to be eaten by the Jew. The less-favoured Christian, not being under such dietary restrictions, would have no hesitation in buying and consuming this condemned meat. It is even alleged that a larger proportion of diseased animals than is here stated is exposed for sale in the Metropolitan Meat Market, and used as food by purchasers of all classes. Whether this be so or not, the fact remains that the Jewish portion of the community have the sole benefit of arrangements specially designed for the maintenance of health. This state of things demands urgent attention, and has surely a claim prior to many other subjects which occupy the time of our legislators.

The Mosaic law, in forbidding the use of blood as food, gives as the reason that the blood is the life. It follows, therefore, if the animal be unhealthy its blood may be regarded as unhealthy. But as the blood may be diseased without external or even internal evidence such as is open to common observation, the total prohibition of it obviates the risk that might otherwise be incurred.

Modern science has discovered in the circulation of diseased animals microscopic organisms of different forms, each characteristic of some particular disease. They are parasitic in their nature, growing and multiplying in the living being, though they are capable of preserving their vitality outside the body. Some, like the bacillus, which is supposed to cause tuberculosis, may even be dried without losing their vital properties, and on entering the system be able to produce the disease proper to them. Others will develop in dead organic substances, but increase more abundantly in living structures. They are very plentiful in the atmosphere of certain localities, and settling on exposed wounded surfaces, or finding their way into the lungs and effecting a lodgment in the blood and tissues, they generate, each after its kind, specific infective diseases. When the blood becomes impregnated by any special organism, a drop may suffice to propagate the disease by inoculation in another animal. The mode of entrance of these morbid germs may be by inhalation, by inoculation, and by the ingestion of poisonous particles with the food. Any person living in unhygienic circumstances, and whose system is from any cause in a condition suited for the reception of these organisms, cannot safely eat meat which may contain them in the blood. In the splenic fever of cattle, for instance, which is communicable to man, these germs are exceed

ingly numerous, and the same may be said of the other specific febrile diseases. Eventually there is a deposit of morbid material in the tissues, where the process of development goes on till a great change in the once healthy structures is effected.

With the light derived from recent investigation we are able to understand the wisdom and foresight of the Mosaic injunction as well as appreciate its supreme importance. The Jew, like the Christian, is exposed to the inroads of disease when he breathes an infected atmosphere and eats tainted food, provided he is susceptible at the time to the morbid influence, but he is protected by a dietary rule at the point where the Christian is in danger. The Jew who conforms to the law of Moses in this particular must have a better chance of escaping the ravages of epidemics than those who are not bound by these restrictions. This hygienic maxim goes far to explain the comparative freedom of the Jewish race from the large class of blood diseases.

The examination of the carcass is also necessary with the view of determining the sound or unsound condition of the meat. At one time it was doubted that the complaints from which animals suffer could be communicated by eating their flesh, but the evidence of eminent authorities has definitely settled the question. Such bovine diseases as the several varieties of anthrax, the foot and mouth disease, and especially tuberculosis, are now believed to be transmissible through ingested meat. It has been proved that the pig fed with tuberculous flesh becomes itself tuberculous, and the inference is fair that man might acquire the disease if subjected to the same ordeal. This last disease is very common amongst animals, and is now recognised as identical with that which is so fatal to the human race. It is considered highly probable that the wide-spread mortality caused by this malady is due in a great degree to the consumption of the milk and meat of tuberculous animals. That the milk supply should be contaminated is a very serious affair for the young, who are chiefly fed on it. The regular inspection of all dairies by skilled officials is imperatively necessary to ward off a terrible and growing evil; just as a similar inspection of slaughter-houses is demanded in the interests of the meat-eating portion of the community.

Temperance is a noteworthy feature in the habits of the Jews. Their moderation in the use of alcoholic drinks is deserving of the highest commendation. Very rarely are they rendered unfit for business by over-indulgence in this debasing vice. In no class of Jewish society is excessive drinking practised. The poorest, in their persons, families, and homes, present a marked contrast to their Christian neighbours in the same social position. The stamp on the drunkard's face is very seldom seen on the countenance of a Jew. He is not to be found at the bar of a public-house, or hanging idly about its doors with drunken associates. His house is more attractive by reason of the thrift that forms the groundwork of his character. Domestic broils, so common an incident in the life of the hard-

drinking poor, are most unusual. When work is entrusted to him insobriety does not interfere with the due and proper performance of it, hence his industry meets with its reward in the improvement of his circumstances. This habit of temperance amid abounding drunkenness, more or less excessive, is probably one of the causes of the protection afforded to him during the prevalence of some epidemic diseases, such as typhus, cholera, and other infectious fevers. His comparative freedom from the ravages of these terrible complaints has been chronicled by observers, both mediæval and modern, and is now a subject of common remark. The latest instance of this immunity is furnished by the records of the deaths from cholera in the south of France, where it is affirmed that out of a considerable Jewish population in the infected districts only seven fell victims to the disease, a fact which ought to receive more than a passing notice in the interests of humanity.

Another point that may be mentioned is the provision made by the Jewish Board of Guardians for the indigent poor. It has been said that no known Jew is allowed to die in a workhouse. When poverty, or sickness involving the loss of his livelihood, occurs, charity steps in and bestows the help which places him above want, and tides him over his bodily or pecuniary distress. The mother is also seasonably provided with medical and other comforts when her pressing need is greatest. In this way they are saved from the diseases incidental to lack of food, and after an attack of illness are sooner restored to health than the majority of the poor, who linger on in a state of convalescence little better than the ailment itself, and often sink into permanent bad health from the scanty supply of the necessary nourishment which their exhausted frames require.

In enumerating the causes which have made the Jewish people so strong and vigorous, particular mention must be made of their observance of the Sabbath. This day was appointed for the double purpose of securing a set portion of time for the worship of God, and of affording rest to the body wearied with its six days' labours. The secularising of this holy day in the history of the French nation has demonstrated the need of a day of rest and the wisdom of its institution by a merciful Creator, even before there was a man to till the ground. Obedience to this primeval law, renewed amid the thunders of Sinai, and repeated on many subsequent occasions by Moses and the prophets, is still held by the Jews to be as strictly binding on them as any other religious obligation. Of the physical blessings derivable from keeping the Sabbath day they have had the benefit for many long centuries when other nations were sunk in heathenism and ignorant of the divine ordinance made to lighten their labours and recruit their strength. In Christian countries where the Sunday is kept sacred, or observed as a holiday, another day of rest in addition to their own Sabbath is obtained, thus fortifying them against the crushing toil and nervous strain of modern life. The loss accruing from this enforced abstinence from business worries is more

than counterbalanced by the gain in nerve power with which periodical cessation from any harassing employment is compensated. This is doubtless one of the factors which have helped to invigorate both mind and body, and to develop in them those high qualities for which they are justly distinguished.

To sum up—the longevity of the Jew is an acknowledged fact. In his surroundings he is on a par with his Christian neighbour. If the locality in which he dwells is unhealthy, he also suffers, but to a less degree. If the climate is ungenial, its influence tells on him too, but with less injurious effect. His vigorous health enables him to resist the onset of disease to which others succumb. These advantages are for the most part owing to his food, his temperate habits, and the care taken of him in sickness and poverty. No doubt he is specially fortunate in inheriting a constitution which has been built up by attention, for many centuries, to hygienic details. His meat is drained of blood, so that by that means morbid germs are not likely to be conveyed into his system. It is also most carefully inspected so as to prevent the consumption of what is unsound, hence his comparative immunity from scrofulous and tuberculous forms of disease.

How can the benefits which the Jews enjoy be shared by other races? In regard to food, whatever prejudice may stand in the way of draining the blood from the animal, it ought surely to be done when there is the least suspicion of un-

healthy symptoms; but there can be no doubt about the urgent necessity for a strict supervision of our meat markets, so as to prevent the sale of diseased food. Legislation ought to make such regulations as will render impossible the continuance of an evil which, by oversight or otherwise, is dangerous to the general health. Temperance is a virtue within the reach of everybody, and is now widely practised by all classes, and the gain in improved health will soon be apparent in the lessening of ailments due to drunkenness. Charity is as much the duty of the Christian as of the Jew, and it is a dishonour to the Master whom the former professes to serve if he shuts up his bowels of compassion when the poor, who have always claims upon him, call in vain for the needed help. They ought never to be allowed to languish in sickness and poverty till the friendly hand of death brings a grateful relief to all their troubles.

The Bible is regarded by some scientists as an old-fashioned book; but its teaching in relation to hygiene, even they will confess, has not become antiquated. It must be credited with having anticipated and recorded for our instruction and profit doctrines which are now accepted as beyond dispute in this department of knowledge. In the Mosaic law are preserved sanitary rules, the habitual observance of which by the Jew, from generation to generation, has made him superior to all other races in respect of health and longevity.

EDUCATION BY MACHINERY.

EVERY day in Great Britain and Ireland we spend £400,000 on drink, and this we do with the utmost cheerfulness. For our scheme of national education, however, science and art included, we set apart only £13,296 daily. Yet the average ratepayer is inclined to grumble at this expenditure; and when we are warned by educational authorities that during the next few years the sum to be voted by Parliament for the instruction of the rising generation will annually increase, some of us cry out that the Education Acts, from the first to the latest, have been frauds. In 1870 we were told that the School Board rate would not exceed at any time threepence in the pound. This year it has risen in some towns as high as one-and-eightpence. In London it is eightpence, and most certainly it will be ninepence or tenpence in the metropolis within the twelvemonth.

What we spend on this State education is easily seen; what we save by it is not so easily discovered at a casual glance. Each of our paupers costs us £21 10s. a year. Each of the criminals in our prisons costs us about half as much more. Each of the children we educate by State means costs us £2 13s. 8d. a year. Does not a little reflection show that of these three outlays the

last is the only one that is productive? It is like capital invested. In the first place, by rescuing children from the squalid surroundings of homes in which ignorance and vice prevail, and giving them a knowledge of the big world around them and tastes which exercise a refining influence, we are doing one of the best things in the world to keep the youthful poor of the nation from entering on careers of crime that lead to the prison doors. In the second place, we are fitting these girls and boys with that education which alone will enable our working classes to contend in the coming years with the intelligent competitive labour of the chief Continental nations. Unless we can successfully maintain this competition our industries will decay and our poor-houses will grow larger and larger. The only thing that the ratepayer should look to closely at present is to assure himself that there is effectual work done for the money spent.

It is extraordinary how many of those who grumble at Education estimates in this country are content to remain in absolute ignorance as to what the provisions of the existing Education Acts are, and how they are carried out. The various organisations of voluntary schools throughout the land



A COOKERY CLASS.

From a Photograph.

have happily suffered far less than was anticipated from competition with State education. No ratepayer need find much difficulty in gaining access to some of these denominational establishments in his own neighbourhood and seeing what fine work they are accomplishing. But, except in regard to religious teaching, all of the elementary denominational schools are bound to administer a system of education similar to that given in Board schools; and as it is in a good Board school that the Government's ideas on the instruction of the rising generation are most completely formulated, a visit to such a school should prove highly interesting to any intelligent inquirer.

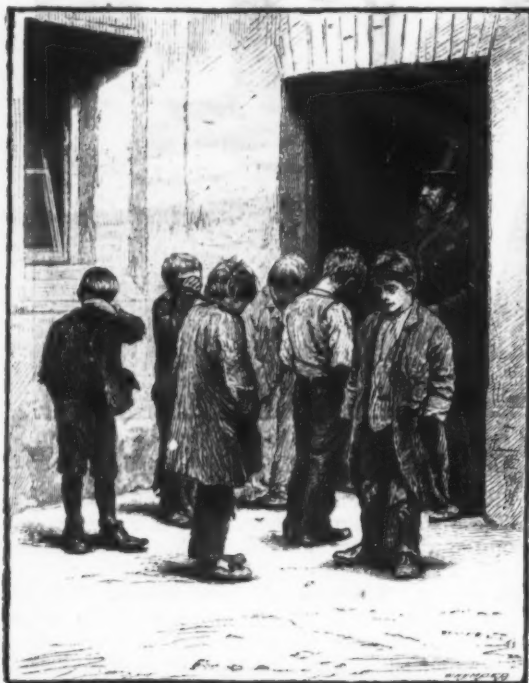
The London School Board is rightly regarded as the true educational parliament of the country, where the theories of the code are best discussed and practically tested. It annually administers an income of more than one million and a half, and manages three hundred thousand children. It therefore possesses responsibilities and powers greater than those of a petty kingdom. Some say that it exceeds the powers given to it by Parliament; that it is too much given over to theories; and that it neglects the cause of the poorest classes of children in order to compete with the secondary schools. It is difficult to see how the functions of a Board governing a system involving so many complexities could ever be

discharged with any regularity except by theorists. The Board is certainly composed of theorists, but on the whole they have shown themselves willing to learn new lessons by each year's additional experiences. Theories are good things. The accumulation of experience necessitates in many logical minds the formulation of theories. The only requisite is that the theories follow the experience, and do not precede it. Accordingly the work of the London School Board is likely to secure the confidence of the public more and more. Perhaps it is true that at present it exhibits a tendency to educate in certain of its highest class schools beyond the limits assigned to it. But its devotion to the true interests of the poor children of the metropolis is patent to most people who have watched the development of its schools. In each of the overcrowded and poverty-stricken districts of London the Board's schools perform a public service only second in efficiency to that of the hospitals. A single illustrative example of the work they do may be given here.

There is a populous district of Islington lying south of the Caledonian Meat Market. A few years ago this was a conglomeration of terribly unhealthy hovels of the poor, thieves' dens, and fourth-rate drinking-shops. It is still bad enough. The Midland Railway almost overwhelmed it with the poorest classes by driving thither much of

the labouring population of Somers Town. Blocks of "Improved Dwellings" and sundry measures taken by the parish authorities have recently reformed the district to a considerable extent. Yet it remains a haunt of poverty. The petty tradesman is the aristocrat of the neighbourhood. The police in its streets are all picked men. The swells who go "slumming" through it, according to the fashion of the season, are looked at by the patient-eyed poor with the same wonderment that butterflies in its alleys would create.

In the midst of this sordid district stands a handsome new Board School. It is as large as an average fortress of ancient times. Its bound-



TRUANTS. *From a Photograph.*

ing walls contain a space of two acres. Within the intricacies of the playgrounds and covered courts and ground-floor passages the visitor becomes bewildered. It reaches a height of many storeys. And here, every day, 2,200 poor children are being endowed with the inestimable benefit of a sound education. It is indeed quite a town in itself, filled with Liliputians who can exhibit at times remarkable freedom of speech and action. Their parents chiefly come under the following categories: labourers, 355; cabmen, 97; coalmen, 93; charwomen, 78; joiners, 50; porters, 45; painters, 44; carmen, 44; stokers, 32; bricklayers, 31; gas stokers, 25; stablemen, 25; blacksmiths, 25; factory men, 23; needlewomen, 22; shoemakers, 22; slaughtermen, 21; railway servants, 21; costermongers, 19; bakers, 17; milkmen, 16; tailors, 10. Among the others are sweeps, potmen, cat's-meat vendors, hucksters,

drovers, barmaids, barbers, plumbers, sailors, mangle-women, etc., etc. The social state of the people sending children to this school may be indicated by the single fact that, out of their number, 415 families inhabit only one room a-piece, and 1,030 inhabit homes of two rooms. The families number six individuals on the average.

Let us see what this school—Gifford Street Board School—does for the children coming from such overcrowded abodes.

In going over such a place one is naturally reminded of the process of fish-hatching; for all stages of development are to be found in it. The youngest pupils are only a year old. These are the offspring of mothers who are compelled to put them in the kindly charge of the school authorities while they go out to earn some sort of a livelihood. The little creatures are brought to school at nine in the morning and remain till five, except that most of them are taken out between twelve and two for food. Of course such babes are quite helpless. They tumble about together in a huge cradle, always under the watchful eye of a motherly nurse. The morning they devote to speculative studies after their own fashion, trying to tear to pieces anything they can lay hands on, or in default of such manual employment, pondering the mysteries of the external world with a zeal worthy of the metaphysical Bishop Berkeley. It is the afternoons—especially hot afternoons—that the babies usually select for self-instruction in the management of the voice. Their little bodies are then rather weary of this big world; and if sleep does not lay a soothing hand upon them they are apt to try the attendant's patience a good deal with their fretful squalling. In the same room with this crèche are such other infants as are below the age of three. They are very gleeful when any visitor appears in their midst. Their chatter may stop for a few moments, but usually one or two will pull at the new-comer's skirts and make overtures in the direction of some fun. Such is the population of the nursery, which has an average number of forty inmates. They are all well cared for. Even were it possible for their mothers to leave them at home, day after day, they would become dirty, and would be in a hundred dangers. Here every kind of necessary attention is paid to their physical well-being, and the excellent head infant mistress is very proud of the fact that the disease called rickets is unknown among her charges.

The next stage of the education process is devoted to the little ones aged three to four. These number about 100. Their intelligence is now sufficient to enable them to use their powers of observation with some amount of logic, and accordingly they are employed in Kindergarten exercises, such as pricking patterns on cards, or building with bricks after set models. They likewise begin to sing by ear, and learn a simple drill. The various portions of this drill form one of the most pleasing sights in the school; and the exercise is greatly enjoyed by the children.

The next class is composed of about two hundred little ones between the ages of four and five.



SEWING CLASS.

From a Photograph.

They go on with Kindergarten work and singing, but also learn the letters of the alphabet and their sounds, and the simple strokes in writing. Then we have the children between five and seven, numbering about a hundred and forty. These begin reading easy primers; they learn also to write capital and small letters, and easy combinations of letters. Needlework is begun with the girls at this stage. The Code has tried to encourage the education of the young boys also in the use of the needle; but any one who has seen how grievous this work is to the little lads, and how gladly they take to pencil-work instead, must be of opinion that they could be employed more usefully than in a hopeless competition with the girls. In Gifford Street School the boys between five and seven now learn, instead of sewing, an easy style of geometrical drawing on chequered slates. This they enjoy very much.

There only remains one other class in the infant department. This is known as Standard I. It is formed of children over seven, and, being chiefly composed of pupils who have passed the lower grades of the school, it is usually in a highly efficient state when the Inspector comes round to examine. Its work is but a slight advance on the work of the class immediately below it. All the children in these various infant classes, except the babies, receive two object lessons every day: in the morning, a lesson about some simple in-

animate natural object; in the afternoon, an account of some animal.

The head mistress of the infant department now resigns the charge of the young ones whom she has superintended with such intelligent and affectionate care. They are well prepared to proceed to standard work, the boys and the girls being henceforth separated. Following the gentler sex for the present, we find that the Standard I girls drafted from the infant department into the girls' department form a striking contrast to another Standard I class existing there. This latter has in its ranks many a rough girl who hardly knows her letters, and who is at school for the first session in her life. Perhaps one or two of them are "magistrates' orders"—that is, street vagrants sent to school by command of a police magistrate. It is no uncommon thing for the masters or mistresses to receive in this way children of fourteen who either know no letters or else recognise but three—"a," "s," and "w." These three are always the first to be learnt by the children, their forms being the most distinctive. The Standard I children from the infant department of course pass on to Standard II in the upper school, and their progress is steady and satisfactory, so long as their parents allow them to remain. The Standard II work includes reading, writing, dictation, and arithmetic in the morning; sewing, drawing, and singing in the

afternoon. In all the classes of the school the dry work is done in the morning. Next year the same girls pass to Standard III, and there begin history, while keeping up the subjects just mentioned. The amount of needlework is here increased. In Standard IV the children still hammer away at the same themes, all of which form the basis of a sound education. Comparatively few of the pupils in such a school are allowed to reach Standards V, VI, and VII, as their parents require them to work or attend to their homes as soon as they reach the age of fourteen. Consequently in this school these upper standards are taught together, a few extra subjects, such as physiology, being given. But the most important of recent changes in the school is the provision by which all girls who will be twelve years old at the next Government examination, and who have passed Standard IV, are practically instructed in cookery three times a week. The advantages connected with this special branch of education are obvious. Any parent, however, has the right to withhold her child from the cookery class, and, sad to relate, many of the poorest parents, through ignorant prejudice, refuse to allow their girls to learn cookery at all.

The boys go through the same standards as the girls, and learn almost exactly the same subjects. They devote more attention, however, to geography, which in their course of studies replaces the needlework of the other department. In the upper standards a specially useful course of informal lectures on political economy is given, and through this means the boys about to go out into the world learn the principles of the distribution of wealth, the functions of capital, the play of supply and demand in manufactures, the meaning of free trade, and other kindred topics. Occasionally the upper-standard girls and boys meet for competition in the ordinary subjects, and this rivalry is productive of the best effects, not only among the pupils, but among the junior masters and mistresses themselves.

Such is an outline of the daily manufacture of educated beings going on in this immense school. The discipline throughout the whole school is excellent, while yet good-humour prevails between the teachers and the taught. The children are, of course, far from being angels yet. Every now and again the cane and the birch are in requisition—generally for hardy truants. The neighbourhood of the Cattle Market and the canal is the chief source of temptation to these truants. Mrs. Surr has often pleaded the cause of London school truants, declaring that they are actuated only by "an excessive love for God's air and God's sunshine." Nine out of ten Gifford-Street truants may be found either prodding the animals in the market with sharp sticks or making mud-pies on the canal banks. The little rascals exemplify the kind of life that many hundreds of London children were left to lead before the passing of the Education Acts. One single fact will show what these Acts have done for poor districts. The children of the rich generally dislike school; the great majority of the poorer Board children look upon the school as a sort of haven of peace, where they have fresh air to breathe and interesting things to hear about, and where they are free from the constant din of overcrowded tenements, and perhaps also the scarcely less constant wranglings of drunken parents. Those who fear that we are educating these children above the station in which Providence meant them to exist will be surprised to learn that whereas, a few years ago, most of the promising lads in such a school wanted to be clerks and suchlike, the majority now declare in favour of trades. That is to say, the effect of the Education Acts has been to increase the demand among employers of labour for educated workmen. There can be no doubt that all this elementary education will make the British workman of the next generation a better man, and the man a better workman.

ERIC ROBERTSON, M.A.

PETROLEUM.

THE introduction of mineral oils for lighting purposes has effected, almost imperceptibly, a revolution scarcely less extensive than that which was brought about early in the present century by the introduction of gas, or than that which is now apparently about to be effected by the electric light. It seems but the other day that for domestic lighting the choice lay between gas and candles. In many houses in towns and in all houses in villages and outlying places, candlesticks, snuffer-trays, and snuffers were indispensable portions of the domestic paraphernalia, and the character of the illumination ranged somewhere between the glow-worm effulgence of the humble rushlight and a galaxy of wax candles or "moulds." Until a very few years ago there

was practically nothing else to be had for love or money.

What the introduction of mineral oil as an illuminant has done for the better lighting of every lowly home throughout the land we all of us know, but there is one point of improvement which has probably escaped most of us. "Candles," says Captain Galton, in his handbook on "Ventilation, Warming, and Lighting," published for the council of the Health Exhibition, "are a very costly luxury when compared with colza oil, and this again is two and a half times the price of petroleum." Quoting from a paper by Mr. Brudenell Carter, in "Our Homes," he shows that for a given amount of light sperm candles would cost £4 5s. 9d., ozokerit candles would

cost £1 14s. 3d., colza oil in moderator lamps with Silber's burner would cost 7s. 2d., and petroleum burned in the same way would yield the same result for 2s. The offer of far better light at a far less cost could not fail to be promptly accepted, and practically candles have been extinguished and oil-lamps substituted with a rapidity which would have been very striking indeed, but that, unlike gas or electricity, mineral oil has effected its triumphs for the most part in the privacy of small homes.

The great revolution by which candles have been so largely supplemented by oil-lamps dates its commencement from the discovery of paraffin, which, while it afforded an excellent material for candles, led also in its process of preparation to the production of paraffin oil, which first popularised lamps in place of candles. Mr. James Young was the introducer of paraffin about 1848, and then in 1859-61 came the grand discovery of the oil springs of north-west Pennsylvania. So far as this country is concerned the whole of the petroleum industry has been developed since that time, and now within the past twelvemonth or so the market has been woefully depressed owing to the accounts which have been brought to this country from various sources of an inexhaustible petroleum region on the borders of the Caspian Sea. So that between gas, electricity, and oil we seem to be in a fair way to get "more light," and that at a cheaper rate. On this new source of supply our scientific contemporary, "Engineering," recently gave a series of articles, and Mr. Charles Marvin has written a considerable volume. We shall have to acknowledge our indebtedness to both these sources of information, but before noticing the petroleum regions we ought, perhaps, to have a little to say on the thing itself.

"Petroleum," says Dr. Geike, "is a general term, under which is included a series of natural mineral oils. These are fluid hydro-carbon compounds, varying from a thin, colourless, watery liquidity to a black, opaque, tar-like viscosity. The paler, more limpid varieties are generally called naphtha; the darker, more viscid kinds, mineral tar; while the name petroleum, or rock-oil, has been generally applied to the intermediate kinds." This same high authority on all matters geological says that it is specially confined to particular layers of rock, and he thinks it can hardly be doubted that it is produced by certain changes which take place in organic substances embedded in those rocks. What is the probable nature of those organisms, and how they are distributed, has not in his opinion been satisfactorily explained. The coal-seams and bituminous shales seem to be the formations which embody the substances yielding petroleum, but whether these substances are the animals or fish of bygone ages, or their decayed vegetable matter, seems to be the subject of some difference of opinion. Whatever the substances may be, however, the alterations in them which produce petroleum oils are, Dr. Geike thinks, due to the action of igneous rocks, which in a molten condition sometimes invade coal-measures and bituminous shales. The destruction of these gives rise

to subterranean distillation, the gases produced finding their way to the surface of the earth, and the liquids, in the form of mineral oils, collecting in fissures and cavities, and often bubbling up in springs just as water does.

As ordinarily drawn from springs and wells in different districts, the fluid has an olive-greenish hue, but a bottle of it held up to the light shows a dark-brownish red. It is in its crude state exceedingly inflammable, and before it is fit for domestic use it has to undergo a process of distillation which ought to render it, and no doubt commonly does render it, perfectly safe. There is, in fact, very little probability of a consignment of explosive petroleum finding its way into the English market, though there can be no doubt that it is sometimes rendered explosive by the manner in which it is used. In the first place, the law of the United States does not allow any petroleum to be shipped till it has been tested and certified by the experts of the port to be unflammable below a certain temperature. Then of course the importers in this country stipulate for a certain "flashing point"—stipulate, that is to say, that it shall not give off an inflammable gas below a certain point of temperature—and samples of every consignment of oil as it comes in are drawn and submitted to experts (in London to the experts of the Petroleum Association) with the view of testing its character. In addition to this, there is a public authority in each of our ports whose business it is to guard against the danger of a stowage in sheds and warehouses about the docks of too highly inflammable an oil. In the port of London, within the metropolitan area, we have had at times within the past year or two from 200,000 to 300,000 barrels of petroleum, and it may easily be conceived what a frightful risk would be involved if any part of that vast accumulation were of a nature such as to give off at ordinary temperatures an explosively inflammable gas. It is in London the duty of the Metropolitan Board of Works to see that nothing of the kind comes into the port, or at any rate to take measures for removing it if it does.

Notwithstanding these manifold safeguards it is scarcely possible to say that no dangerous oil comes into use; but it is certainly extremely improbable. How then, it may be asked, does it happen that we so frequently hear of explosions of oil-lamps? A recent report of Captain Shaw's, the chief officer of the Metropolitan Fire Brigade, shows that in the course of a year the brigade had been called to fifteen fires occasioned by the explosion of lamps. There were a great many other fires occasioned by the upsetting of lamps, but these were the result of explosions alone. There were some fires also evidently caused by lamps, but in a manner which could not be clearly determined. It is reasonable to assume that some of the cases would have been explosions. Besides, there would of course be a great many other cases which did not occasion fires requiring the services of the brigade, and which would not therefore find a notice in the report. It seems pretty evident then that the explosion of an oil-lamp is

an occurrence of somewhat serious frequency. How does it happen if it is improbable that any dangerous oil can find its way into the market? We will try and answer this.

The crude petroleum, as we have said, is exceedingly inflammable. At the ordinary temperature of the atmosphere it gives off hydro-carbon vapour. There are parts of the world where this bubbles up from the sea or issues from holes and fissures of the earth, and the application of a light sets it in a blaze. "The whole country round Baku," says an anonymous writer quoted by Mr. Marvin, "has at times the appearance of being enveloped in flames. It often seems as if the fire rolled down the mountains in large masses with incredible velocity." Another writer speaks of the flames from the petroleum gases of the peninsula of Baku as bursting forth spontaneously, "and during boisterous nights the hillsides are swept by sheets of phosphorescent light." In the great oil works of America and Canada the constant emanation of this light inflammable vapour is a source of great danger, and frequently the most tremendous conflagrations have resulted from the accidental ignition of it. One very curious fact is that the oil tanks there seem to be extremely liable to be struck by lightning, against which no conducting-rods seem to be of the slightest use. It has been conjectured that the vapour referred to rises from the surface of the oil to a great height in the air, and that it constitutes a very effective lightning-conductor by which the electric flash is brought down with most destructive effects into the huge vats containing the oil.

Now it is the emanation of this light hydro-carbon vapour—very much of the nature of common coal-gas—which constitutes the danger of petroleum oil. If a light be applied to the vapour in an open vessel it will burst into flame; but if a light be applied to it when confined and mixed with ordinary air an explosion will follow quite as severe as would be the case with a mixture of coal-gas and air. Before petroleum can be used for domestic purposes this volatile gas must be expelled from it. In order to do this it is subjected to a process of distillation. The crude fluid is enclosed in a vessel and subjected to a certain temperature, which evaporates a certain portion of the oil. The evaporated portion is conducted into another enclosed vessel and condensed by cold into what is known as "benzine" or "benzoline" spirit. It used to be largely consumed in small lamps, the wicks of which were in contact with a piece of sponge saturated with the spirit. When properly managed the benzine lamps themselves are not dangerous; but the fluid with which the sponges are steeped is exceedingly so. It is so perilous that it has been made illegal to store it at all within the limits of the City of London, and it can be stored anywhere else only with special licence and under the severest restriction. Shopkeepers are permitted to keep only a very small quantity, and they are liable to a penalty and the loss of their licence if they sell it after dark. The mere opening of a bottle of it anywhere in the

vicinity of a light would be pretty sure to result in an explosion. There is a certain amount of convenience in the use of these sponge-lamps, and as there is nothing in them to spill if they are upset, they are so far safer than the oil-lamps; but there is so much danger attached to the use of the spirit that on the whole it would be better if this illuminant were altogether forbidden by law. It is now quite out of date. It is, however, still used to some extent, and it is very likely that some of the explosions of which one hears now and again are due to this volatile and highly dangerous spirit of petroleum.

When all the spirit that can be evaporated at a given temperature has been driven off, the petroleum will be safe from explosion at lower temperatures. It is not, however, this remaining fluid which is sold for lighting purposes. This again is subjected to a higher temperature, and the vapour given off is condensed as before. This condensed vapour will of course be very much less inflammable than the "benzoline" first given off. The heat is again raised, and again the condensed vapour will show a higher "flashing point" than before. When no more vapour can be driven off at this higher temperature, there will still be a great body of petroleum left. Of this we shall have to speak presently. It is, or should be, the refined oil alone—that which has been evaporated and condensed—which is sent into the market for lighting purposes.

The petroleum of ordinary commerce is quite safe up to a temperature of one hundred degrees in the open air. A hundred degrees Fahrenheit is the "flashing point" established by Act of Parliament of 1879 for oil tried by what is known as the "open test." According to a "close test," devised by Professor Abel, the flashing point is 73 degrees. No oil can, without infringing an Act of Parliament, be sold for illuminating purposes if at a lower temperature than 100 degrees in the open or 73 degrees in a closed vessel it gives off a vapour which flashes on the application of a light. Now, it must be quite evident that although petroleum as purchased from the oilshop may come well within the requirements of the Act of Parliament, and may be perfectly safe, it may not be safe if exposed to any great increase of temperature. It may be impossible to make it explode so long as it is kept cool, but if in any way you heat it to any great extent it may begin to give off the hydro-carbon vapour, and the application of a light may result in a violent blow-up. Sometimes, no doubt, lamps are stood in warm positions, or by the faulty structure of the lamp itself the heat of the flame is conveyed down to the oil. The body of the fluid gets heated, a little inflammable vapour accumulates in the space at the top of the petroleum, and then perhaps a downward draught of air or an attempt to extinguish the lamp by blowing into the chimney drives the flame down, and a violent explosion is the result. How tremendous may be an explosion of this vapour was illustrated at Rheims some thirteen or fourteen years ago, when an explosion at a petroleum factory killed somewhere about fifty people.

Thus much for petroleum itself, and now for some little account of the new region from which the market seems likely henceforth to be largely supplied—"The Region of the eternal Fire," as Mr. Marvin calls it in the title of his book, with, we think, very execrable taste. It is not, of course, a new region in any sense, except that it has only recently attracted any important degree of attention, and that merely because the world-wide trade which it has always been capable of doing, but which has hitherto been fettered by taxes and restrictions of one sort and another, has lately been set entirely free, and has been brought within easy access from Europe by a railway extending from the Caspian to the Black Sea. The Caucasus mountain range stretches right across from one sea to the other, a distance of 720 miles, and the whole region across which the mountains extend abounds in mineral oil. The main supply, however, says "Engineering," "would appear to be located in the Caspian region, in the Apsheron peninsula, on the one side of the sea, and the Krasnovodsk territory on the other, while welling up in vast quantities from the bed of the sea itself." In other words, there seems to be a great natural storehouse of petroleum extending not only across the Caucasus, but right across the bed of the Caspian Sea and away into the distance on the opposite shore. The chief centre of the trade in petroleum in this region of the earth has long been established at Baku, on the peninsula already referred to as jutting out on the western shore of the Caspian.

At the beginning of this century Russia conquered this Caucasian territory from Persia, and at once, Mr. Marvin tells us, made the extraction of the oil a Crown monopoly, which they farmed out to a merchant named Meerzoeff. The vast Russian territory, much of it wrapped up in frost and darkness for a great part of the year, needed artificial light and warmth for its teeming millions, and here in this newly-acquired Caucasian region nature had provided inexhaustible stores. But the Russian Government wanted money, and the people therefore must be left in darkness. The monopoly yielded a direct profit to the Government, but of course it practically forbade any great extension of the trade in petroleum in Russia, and there were no facilities for bringing the oil into Europe. This monopoly was maintained till 1872, by which time American petroleum had been for twelve years pouring into Russia in enormous quantities, and thus showing practically what a trade might be done and what a boon might be conferred upon the Russian people by the development of its own resources if only they were delivered from the hands of the monopolist. In 1872 that monopoly was abolished, but the Government at the same time imposed a heavy excise duty, and that was retained until 1877, when the trade in petroleum was made perfectly free; and as there is now a railway, as we have said, right across from Baku to the Black Sea, this Russian petroleum industry will be pretty certain to become a formidable rival of the American trade. Even in the time of monopoly and fiscal burdens the use of Russian

petroleum has been steadily extending, as a few figures will show. In 1863 the production of crude oil is given at 5,500 tons; in 1866 it had become 11,100 tons; in 1872, 24,800 tons. The first year in which a Government duty was substituted for a monopoly—in 1873, that is—the production was 64,000; in 1876 it was 194,000; and the quantities for successive years up till 1883 are stated by "Engineering" to have been 242,000, 320,000, 370,000, 420,000, 490,000, 680,000, and 800,000 tons.

This distant Caucasian region, in which Europe thus appears likely to have an increasing interest, is in its way one of the most remarkable on the face of the earth. "Twelve versts from Baku," says Mr. Arthur Arnold, M.P. for Salford, "we came upon one of the oldest altars in the world, erect, and flaming with its natural burnt-offering to this day. Surakhani is the ancient seat of probably one of the most ancient forms of worship. For unnumbered ages the gas which is generated by the subterranean store of oil has escaped from the fissures in the limestone crag, and the fire of this gas has lighted the prayers of generations of priests as it blazed and flared away to the heavens. Fireworship in Persia, of which until the eighteenth century Baku formed a part, is older than history. It may be that the fire in this temple at Surakhani has been unextinguished for a period extending from before the time of Cyrus (about B.C. 600), the fire-worshipping period being older than Cyrus." The peninsula of Apsheron, upon which Baku is situated, seems beyond doubt to have been held as sacred soil by the old fire-worshippers, the followers of Zoroaster, and it is said that their modern representatives, the Parsees, still make their pilgrimages to the fire-breathing rocks and plains of the Caspian shore. Given a religious belief in the deity of fire, the peculiarly sacred character of such a locality must be inevitable, and nobody need be greatly surprised at the poor benighted inhabitants of Persia bowing down in awful worship on such spots as have been described by travellers in this part of the world. "The earth," says Jonas Hanway, the heroic London merchant who first ventured to go abroad in the city with an umbrella over his head, "for above two miles has this surprising property, that by taking up two or three inches of the surface and applying a live coal, the part which is so uncovered immediately takes fire—almost before the coal touches the earth; the flame makes the soil hot, but does not consume it, nor affect what is near it with any degree of heat. . . . If a cane, or tube even of paper, be set about two inches in the ground, confined and closed with earth below, and the top of it touched with a live coal and blown upon, immediately a flame issues without hurting either the cane or paper, provided the edges be covered with clay; and this method they use for light in their houses, which have only the earth for the floor. Three or four of these lighted canes will boil water in a pot, and thus they dress their victuals." This same sagacious observer, writing some hundred and thirty years ago, refers to a temple, probably the one which Mr. Arnold visited

within the past few years. There are several of them, he says, built with stone, supposed to have been all dedicated to fire. "Amongst others is a little temple at which the Indians still worship. There are generally forty or fifty of these poor devotees, who come on a pilgrimage from their own country. A little way from the temple is a low cleft of a rock, in which there is a horizontal gap two feet from the ground, nearly six long, and about three broad, out of which issues a constant flame, in colour and gentleness not unlike a lamp that burns with spirits, only more pure. When the wind blows it rises sometimes eight feet high, but much lower in still weather. They do not perceive that the flame makes any impression on the rock. This also the Indians worship, and say it cannot be resisted, but if extinguished will rise in another place." Then he goes on to describe, as already quoted, the fiery nature of the earth for two miles all round.

Mr. Marvin in his new work gathers together the testimony of a number of travellers for the purpose of showing by a multitude of witnesses the inexhaustible extent of the petroleum supplies of this region. One of these witnesses gives a very curious account of an expedition to go and test the possibility of setting the sea on fire! "Fragant had his long boat manned with ten men, and he and several of his friends and myself left the quay just as the sun went down. We were soon out far in the open bay"—the bay in which Baku stands that is—"and then, rounding a promontory, entered another, and in half an hour more we reached the spot. Gas was bubbling up in several places near the boat, the water looking as if it were boiling. The distance from land is about half a mile, and the depth of the water full three and a half fathoms. A strong odour of naphtha pervaded the air. One of the sailors then threw out a piece of lighted tow, and after one or two ineffectual attempts the waves were wrapped for several yards in flame. It was quite dark, so we saw it quite beautifully. It was a most extraordinary sight; the sea as though it were on fire, a patch of bright flame burning upon its cold bosom. Setting the Thames on fire one had heard of, but I never thought I should really witness the sea in a blaze!" The anonymous writer in the scientific journal already quoted affirms that close to the Apsheron peninsula the gas bubbles up from the sea with sufficient force to upset boats. The whole country round, says Major Marsh, is saturated with petroleum. On making a hole in the ground the gas escapes, on lighting which it burns for a long time—one of the few spots on earth where this extraordinary phenomenon can be seen. When there is no wind the flame is dull and small, but in a gale it roars and leaps up eight to ten feet. "There are two naphtha refining establishments of Surakhani, the furnaces of which are entirely heated by the natural gas, which is collected as it rises out of the ground in iron tanks and laid on by pipes. At night the whole place is lighted in the same manner by ordinary gas-burners attached to the walls. On returning home in the evening we saw the silent waste lit

up by various fires, each surrounded by a group of wild Tartars cooking their food by its heat."

The extent of the Russian territory over which mineral oil appears to prevail in greater or less abundance has been estimated at 14,000 square miles, but the centre of the large industry already developed in the refining and exporting of the oil is, as we have said, on the Apsheron peninsula, which extends out some seventy or eighty miles in the Caspian Sea on its western side. "To most English people," says Mr. Marvin, "the Caspian is a sort of dead sea. They think there is little or no activity there. They forget that it is the natural outlet of the stream of life, of commerce, and of progress flowing down the Volga—the main artery of the Russian empire." It is this fact, no doubt, combined with the profusion of petroleum found in the vicinity, which has so rapidly developed Baku. It is in itself a chief centre of the oil supply on land, and it has direct water communication with the heart of Russia. "What was ten years ago a sleepy Persian town is to-day a thriving city. There is more building activity visible at Baku than in any other place in the Russian empire. It possesses more shipping of its own than Odessa or Cronstadt, and it has commenced the construction of a fine stone quay, which beats the quay of the Neva at St. Petersburg, and is no unworthy rival of the Thames Embankment." This rising town is situated in a fine bay. "I was astonished," says the author of the work before us, "at the amount of shipping lying in the bay. Several handsome vessels were riding at anchor, and a large number of big steamers, many of them two hundred feet long, were taking in oil or other cargoes at the twenty-five long piers which stretch out into various parts of the bay. Starting from the extremity of the Black Town, where the petroleum is refined, we can walk a good eight miles along the strand or quay with shipping always on one side and buildings on the other; and everywhere there is just as much activity as on the strand of the Volga at Nijni during the busy period of the Great Fair."

The wells from which the refineries of Baku are supplied with crude petroleum are at Balakhani, some eight or nine miles away. At one time the fluid used to be conveyed in barrels down to the refineries of the Black Town; but Nobel Brothers—two remarkable, Swedish engineers who have been chiefly instrumental in developing the industry here—organised a few years ago what is known as the "liquid system," and at an enormous outlay laid a system of iron pipes altogether some sixty miles in length; and now not only is the oil conveyed by pipes from the wells to the refineries, but between the different refineries—of which there are two hundred—and also between them and the piers in the bay. The petroleum is poured through these iron channels to the refineries, thence by pipes to a fleet of cistern steamers in the bay, and these carry it off, to be distributed throughout Russia by tank cars, of which Nobel Brothers are said to have about two thousand plying between the Caspian and the Volga and the interior of Russia.

The reason that Balakhani was selected as the principal place of operations seems to have been that the surface presented favourable conditions for work when the oil was obtained chiefly in shallow pits. Now the boring is deeper, but the business has established itself there, and there seems to be no immediate probability of the falling off of the supply. "In America," says our author, "there are over 25,000 drilled petroleum wells. Baku possesses 400. But a single one of these wells has thrown up as much oil in a day as nearly the whole of the 25,000 in America put together;" and he goes on to give a curious account of this one remarkable well, the copiousness of which, while it poured out oil that to an American oil-exploiter would have been worth 11,000 dollars a day, ruined its owner and broke the heart of the engineer engaged upon it. We must notice his account of the mode of boring for the oil. "A wooden derrick of planks and boards, like a huge sentry-box, is erected over the spot selected for the well. This is about twenty feet square at the base, sixty to eighty feet high, and tapering upwards till the top is only three feet square. Here rests a heavy beam, to which the boring apparatus is rigged, much in the American fashion, an iron bit, gouge-shaped, being fitted to a boring bar about ten feet long, and successively increased by other lengths as the depth of the boring increases. The American companies usually bore by manual or horse-power, or use primitive machinery; but Nobel Brothers and other large firms employ engines heated by oil. . . . In America the bores often run small, but in Baku the tubes are invariably large—that is to say, from ten to fourteen inches. The 400 pit-wells do not exceed fifty feet in depth; the 400 drilled wells run from 300 to 800. . . . When the oil is touched there is usually a prolonged discharge of impure hydro-carbon gas. Sometimes this pours up the pipe with a terrific force, roaring so loud that nothing can be heard alongside the well. As often as not grit is carried up with it, and finally comes the oil."

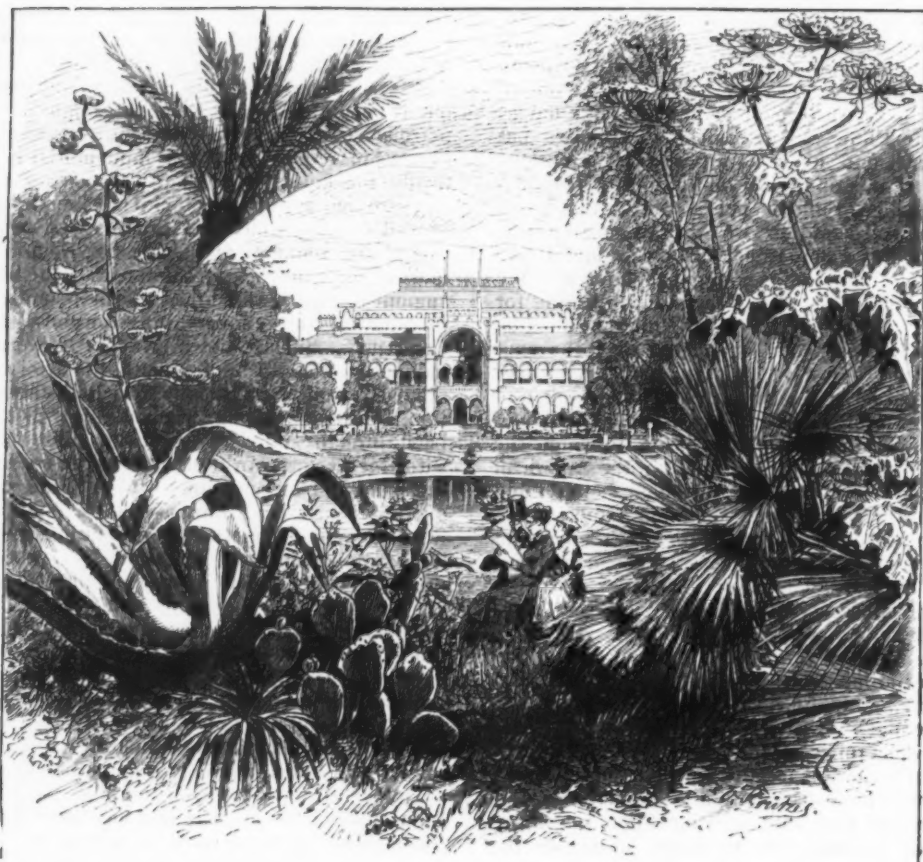
Mention is made of a well the gas in which exploded and blew into the air 500 feet of boring-rod before it could be removed. Precautions have to be taken to control the overflow of oil when the boring has been effected, and in the case of the remarkable phenomenon which was just alluded to as having ruined the owner of a well, such a precaution had been taken, but the "cap" was defective, and while efforts were being made to remedy the defect the oil suddenly blew it off and spirted into the air twice the height of the great Geyser in Iceland, with a roar that could be heard several miles round. "The fountain was a splendid spectacle. The derrick was seventy feet high, and the oil and the sand, after bursting through the roof and sides, flowed fully three times higher, forming a greyish-black fountain, the column clearly defined on the south side, but merging into a cloud of spray thirty yards broad on the other. . . . Now and again the sand flowing up with the oil would obstruct the pipe, or a stone would clog the course. Then the column would sink for a few seconds lower than

200 feet, to rise directly afterwards with a burst and a roar to 300 feet. . . . Some idea of the mass of matter thrown up from the well could be formed by a glance down on the south side; in twenty-four hours a vast stack of sand having been formed which had buried to the roof some magazines and shops, and had blocked to a height of six or seven feet all the neighbouring derricks within a distance of fifty yards."

A great many facts are given which seem to put it beyond all doubt that the supply of crude petroleum that has been known to exist in this Caucasian region from time immemorial is practically inexhaustible. There seems no reason why Russian petroleum should not long ago have proved a formidable rival to American supplies, except the remoteness of this fiery region from most of the countries of Europe, and the limited amount of capital which had up till recently been invested in the oil exploiting business in the Caucasus. Since, however, the Government monopoly was abandoned, and the excise duty removed, capital has rapidly flowed in this direction, and practically, as we have said, Baku has been brought into comparatively close contact with this western world of ours by the opening of the Baku and Batoum line. "Up to the summer of 1883," says Mr. Marvin—whose book, whatever may be its merits as an authority on an important commercial question, is exceedingly interesting—"Caspian petroleum only found its way to Europe *via* the Volga and western Russia, traversing more than 2,000 miles in steamers and tank-cars before reaching the holds of foreign vessels. The construction of the Batoum line reduced this distance to 560 miles at a stroke, and laid the industry open to the civilised world."

This distributing organisation appears to be in itself a very remarkable development. The cistern steamers are vessels of considerable size, some of them upwards of two hundred and fifty feet long. There is an enormous shoal at the mouth of the Volga which forbids their entrance into the river, and consequently a second flotilla had to be provided—light-draught cistern steamers, or large barges from sixty to a hundred and fifty feet long. The oil is pumped out of the large steamers into these river craft and conveyed up to Tsaritzin, the first railway-station on the Volga. Great reservoirs have also been established all over Russia. It is of course mainly in the winter time that petroleum is required for use, but in the winter time the freezing of the Volga stops the importation entirely. The storage of a whole winter's supply has therefore been found a necessity. Orel, in Central Russia, has been made the chief depôt, and there are reservoirs capable of holding eighteen million gallons of burning oil. Four other large depôts have also been established, as well as a great number of smaller ones. All through the summer time some sixty train oil-tanks are busily plying between the reservoirs on the Volga and these various depôts, and in the winter they are engaged in distributing the stored-up petroleum to any points where there may be a demand over the entire railway system of Russia.

BERLIN AND THE BERLINERS.



THE "FLORA," CHARLOTTENBURG.

THE Imperial capital of united Germany is a remarkable city—remarkable for its present appearance, and remarkable for its sudden growth.

A description of Berlin in 1870 would be utterly unrecognisable to-day. Then Berlin was almost a town to be shunned, now it is a city of agreeable and stately appearance. Of antiquity there is but little. Berlin was but a tiny town two centuries ago, mustering but about 12,000 inhabitants; now it is a "Welt Stadt," as its inhabitants so love to term it, housing more than a million souls. Arriving in Berlin by the Hanover or Hamburg railway stations, the stranger best obtains a first favourable view of the town. The drive across the Königs Platz, with its great Column of Victory, and round by the edge of the Thiergarten, and so under the Brandenburg gate into the town between the celebrated Linden, gives one a pleasant first impression.

Around this spot centres all the life and gaiety of Berlin. Along its triple road divided by two rows of the Linden are continually passing and repassing small detachments or regiments of soldiers; on its pavements is a well-dressed crowd thickly sprinkled with officers who frequently look down upon six feet in the smartest of uniforms. Here and there comes a nurse in the curious Spreewald costume of white dress reaching to the knees, bare arms, and white head-dress with coloured ribbons. The Jewish type of face is everywhere traceable, for truly the Hebrews abound in Berlin.

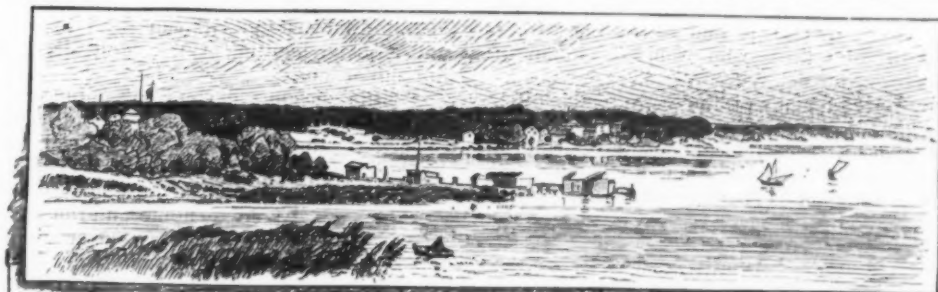
Ten years ago there was but one café in Berlin, and the seats outside at this café numbered six. Now the French have conquered Berlin with their system of cafés, and there are many hundreds of these places of resort throughout the better parts of the town.

The Bauer Café, in the Linden, is essentially a Jewish café, and in the height of the *Juden-*

helze its great glass shutters, which are two enormous pieces of glass, were smashed; but its visitors are not wholly Jews, types of every class are seen there, both military and civil, and of almost every grade. The walls are decorated in the choicest taste, and over the heads of the

by the tourist. But it is to the eastward and southward that lie the great working districts, and these we will first visit.

The long lines of streets with mighty blocks of buildings are all filled with busy workers, living a hard struggling life, who pour forth in



TREPTOW.

ON THE MÜGGELSEE.

their thousands at night to visit some of the great beer gardens that are dotted everywhere throughout these districts.

Here, if it be a garden of the better class, they can listen to a good band giving excellent music of the highest order; they can spend perhaps a pair of groschen (threepence) on a couple of seidel of light innocuous beer, and perhaps four or five more groschen upon a supper. Plants are trained over the trellis-work of the sheltered seats, and the trees are fairly provided with foliage although in the midst of a great city. All around the walls are mottoes from great writers, philosophical sayings and witty, so that the drinker of beer is also imbibing good elevating music and morsels of the thoughts of great minds. This peculiar medley of mind and matter, of perhaps gross and rough indulgence of body combined with a strange and apparently incongruous elevation of

mind, is everywhere met with in all classes in Berlin.

In the long straight streets to the south of Berlin the great blocks of houses are largely built upon the same pattern: a great doorway, near which lives the portier; an inner court, around which tower the great piles of the building; in one corner a steam-engine, which supplies steam throughout the buildings; and over the various doorways are seen the names of the various renters and their trades. Far up to the fourth and fifth floors are busy workers upon every flat. Perhaps the "parterre" is occupied by a big firm, who take in many rooms round the court, and the heads of which live in the rooms which face the main street. But as one mounts the stairs the number of rooms taken in are less, and higher up you come upon the poor

constantly moving, chattering crowd are some excellent paintings of Roman life in the baths and at the feasts. One cynical old Roman sits with his face on his hand, and seems to sneer at all this effervescing mass of trivial humanity. Anton von Werner is the artist of some of these pictures, the others are by equal names. Amidst the crowd are many types, of many countries, even Japanese or Chinese, Russian and Hungarians. Students abound with their flat caps and very probably slashed faces from their duel scars, tall young lads of fifteen, in all the bravery of the uniform of the guards, smart and soldierly, and by the tricks of epaulette and padding made to look quite stalwart men.

Around this central thoroughfare of Unter den Linden is clustered all Berlin that is usually seen

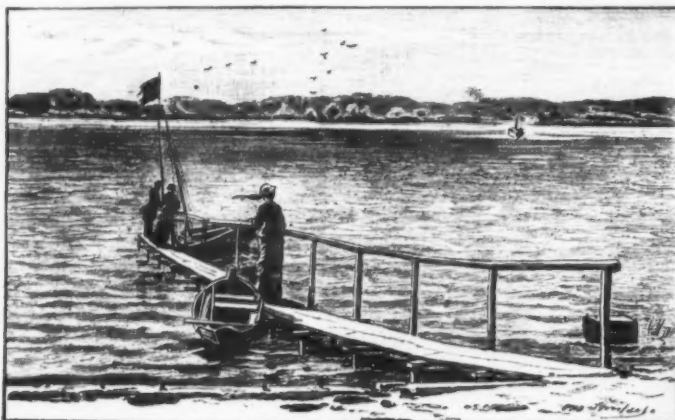
pale-faced "arbeiter," who lives in one room, and makes his workshop and counting-house of the other, and show-room also, for he sells his goods as he makes them for "baar geld" (cash). Even he in his poverty has his pet mottoes placed about, perhaps over his desk "Mench argere dich nicht;" which may be rendered "Man, fret not thyself, be not irritable;" and so without a word he tries to calm those who would complain of some bad work or delay.

The poverty of many of these workers is often extreme, but they generally, in spite of their pale face, keep up a respectable appearance. One of their sayings is, "Man sieht auf die kleider und nicht in den magen" (People look at your clothes

the sand, and a dark lake surrounded by a deep black line of sombre firs. These dark, mournful fir forests have their influence upon the character of the people, and also help to give that sad plaintive key to their sweet part-songs that so often awaken the stillness beneath these shadowing forms. But the chink of glasses after the chorus awakens the German from his reveries, and a jovial hunting or war song fills him with fire and ardour.

A little distance beyond this Grunewald lake are a series of lakes that run down to Potsdam, formed by the junction of the Havel with the Spree. Here the reader of that idyllic story "Undine" may realise the little hut of Undine's

home and the great trees that wave around it, and through which the winds blew when the waves of the lake arose in their fury. Upon these lakes good yachting may be had, and many are the



ON THE TEGLERSEE.

and not in your stomach), and so they dress as well as they can. On Sunday they crowd in their thousands to the beer gardens that lie in the sandy fir forests around Berlin. One of their favourite spots is at the "Gasthaus am Halensee" in the Grunewald. The drive out to this is past the magnificent and immense new building the Polytechnik, and is through sand the whole of the way. The carriage wheels sink deep into this fine sand, that is as it were an immense sea-shore. As the town is left behind dark clumps of fir-trees dot the desert waste, and this is the outskirts of the green forest about which the Berliners compose pathetic songs and melodious choruses. The whole route is on a fine day crowded with holiday-keepers.

There are but very few churches in Berlin, and even these few are but sparsely attended. A "land partie" in the forest is the acme of enjoyment to the Berliners.

The carriages, many with pairs of horses that flounder over the so-called roads, would give a stranger the idea that the occupants were wealthy, but a glance at them shows they are of the poorer order, who choose this way of spending their little surplus cash.

At the Gasthaus is a wondrous garden made in

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upon a holiday afternoon.

On a little promontory opposite Pichelswerder, at this junction of the two rivers, rises a curious monument, upon which is hung a shield and horn and a cross, thus giving it the name of the Schildhorn monument.

This pillar was erected by Frederick William IV to commemorate the escape of the Wendish Prince Jakzo from Count Albert. Jakzo was hard pressed upon the opposite shore, and leaping with his horse into the flood he vowed he would become a Christian could he but reach the spot where now rises this monument. He succeeded in his desperate attempt, and hanging his shield and horn upon a tree, offered up a prayer of thanksgiving to the God of the Christians. His monument is now pointed out, and his story



KREUZBERG.

told by the modern Berliner as he sails in his yacht over the wide-spreading arms of Havel and Spree.

Back from the glimpse of this life goes the poor worker in Berlin to his fourth floor in the

place pattern they may have had to turn out. And this pride in their toil lightens their labour hours and shortens the time spent in their garret homes.

Visitors to Berlin who hear the songs and



STRALAU.

great block, to be awake early in the morning by the whirr of the steam that he must lose no time in employing.

But a great mass of the Berlin workmen take

choruses in favour of the Spree, and all the poetry that might be said of some lovely stream winding through picturesque scenery, look at the black, filthy stream that sluggishly creeps past the walls



EVENING—GRUNAU.

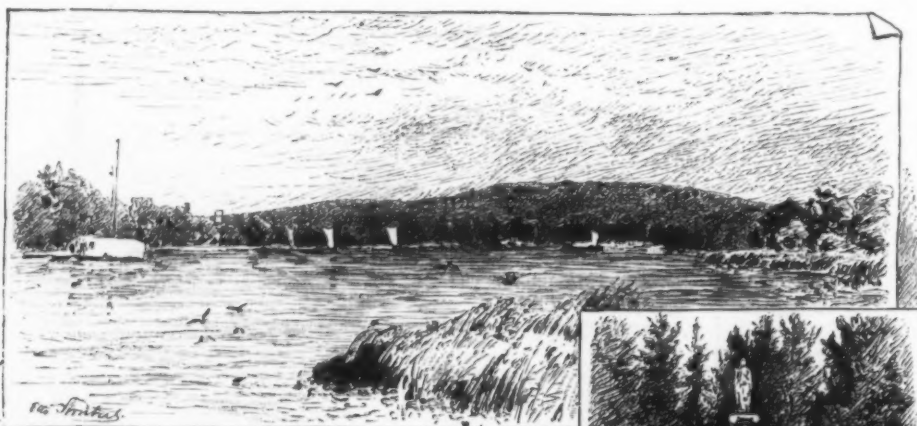
a high interest in their work. They speak with pride of their own special manufacture, and with disdain and a "That's nothing" of any common-

of the old palace, and laugh at the absurdity of such a stream being "idylised." But the Spree enters largely into the pleasures of all Berliners,

and both above and below Berlin it opens up into pleasant little lakes, whereon the wealthier business people keep their little yachts and have

saying, "Why, it's at least a hundred and fifty years old!"

Farther up the Spree the river opens into a series



ON THE BANKS OF THE HAVEL.

their country houses, where fishing and shooting and sailing may be enjoyed.

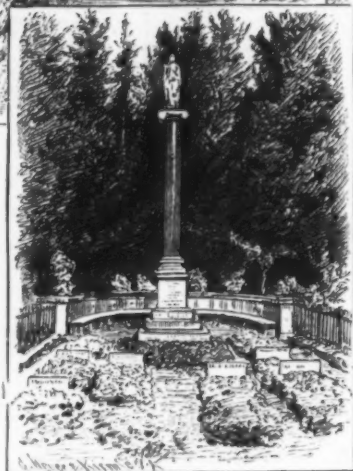
Above Berlin a near run, that may be reached by either steamboat, railway, or tram, is Treptow, where the Spree passes through a series of little lakes dotted with numerous islands. Many of these islands are turned into pleasure places, with cafés and gymnasiums, and, of course, skittle alleys. No Berliner could live without his *kegelbahn*, and a pleasant spot this is in summer time, with the bright, clear waters, the green fields, and waving trees, here not all dark firs.

An excellent idea of what is considered old in Berlin was given by a Berliner when sailing over these little lakes. On the shore of one of these lakes stands a church (Stralau), which he pointed out as being excessively old. The architecture seemed very modern, and doubt was thrown upon its antiquity, but he emphatically declared it was very old, one of the oldest churches anywhere near, and he clenched the matter by

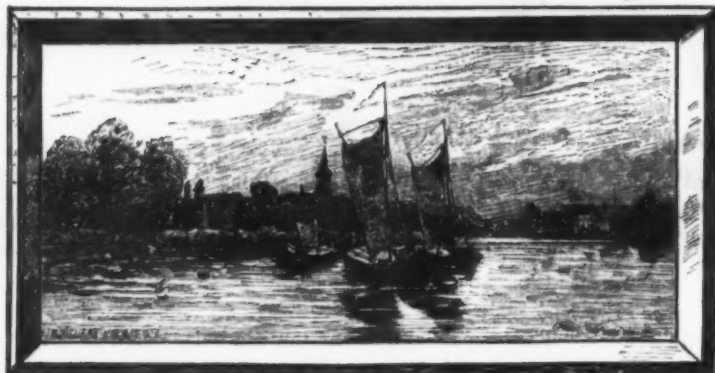
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connecting streams in no unpleasant fashion, the largest, the Müggelsee, being a favourite resort.

The system of living in flats obtains largely in Berlin amongst all classes, even the wealthy and cultured. A business house may be composed as follows. In the basement resides a shoemaker or



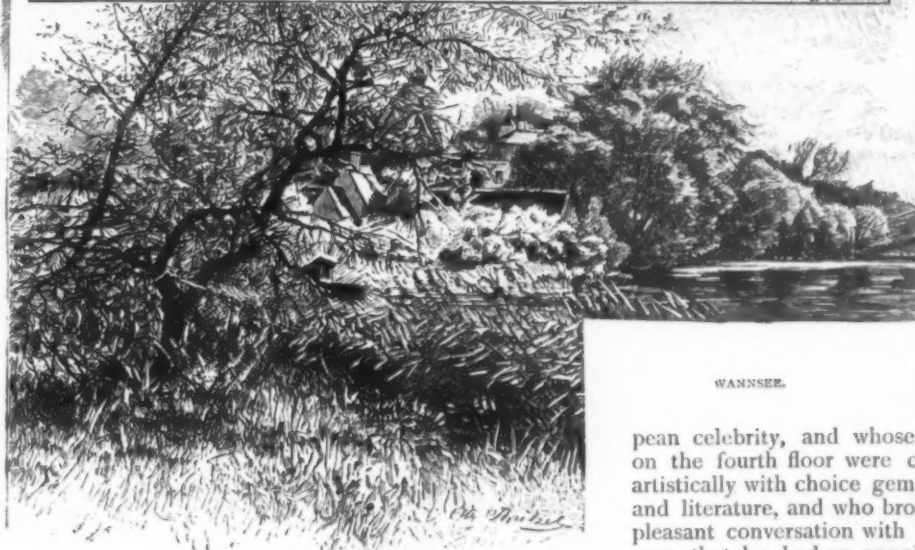
HUMBOLDT'S GRAVE AT TEGEL.



SPANDAU.

small chandler; on the ground floor is the warehouse of the great firm; above this is an hotel; above this again resides a family, perhaps not

A peculiar instance was afforded in two visits paid to two gentlemen of the same profession. One a man whose name was of Euro-



HUNTING LODGE AT GRÜNEWALD.

WANNSEE.

connected with the warehouse below. On the third floor resides the second partner in the firm, whose rooms are well and elegantly furnished; the dining-room in unpolished oak, excellently carved; the drawing-room and music-room in quiet, rich taste; the bedrooms with hangings and wall-papers to match, all in good and expensive style. Above the head of his bed is an electric bell connected with the warehouse below, and attached to doors and shutters; at its side is a revolver. "We have some fearful fellows in Berlin!" as he remarks.

This partner is probably conversant with six or seven languages, and is well read in most of them. Above him, on the fourth floor, at the top of the house—"the air is best at the top"—resides the head of the firm, with rooms more luxuriantly furnished, but whose wife, one would think, would hardly descend frequently to the level of the street. The sky-floor is sometimes the abode of the richest dweller in the house, whilst at other times the poorest has to climb the wearying stairs.

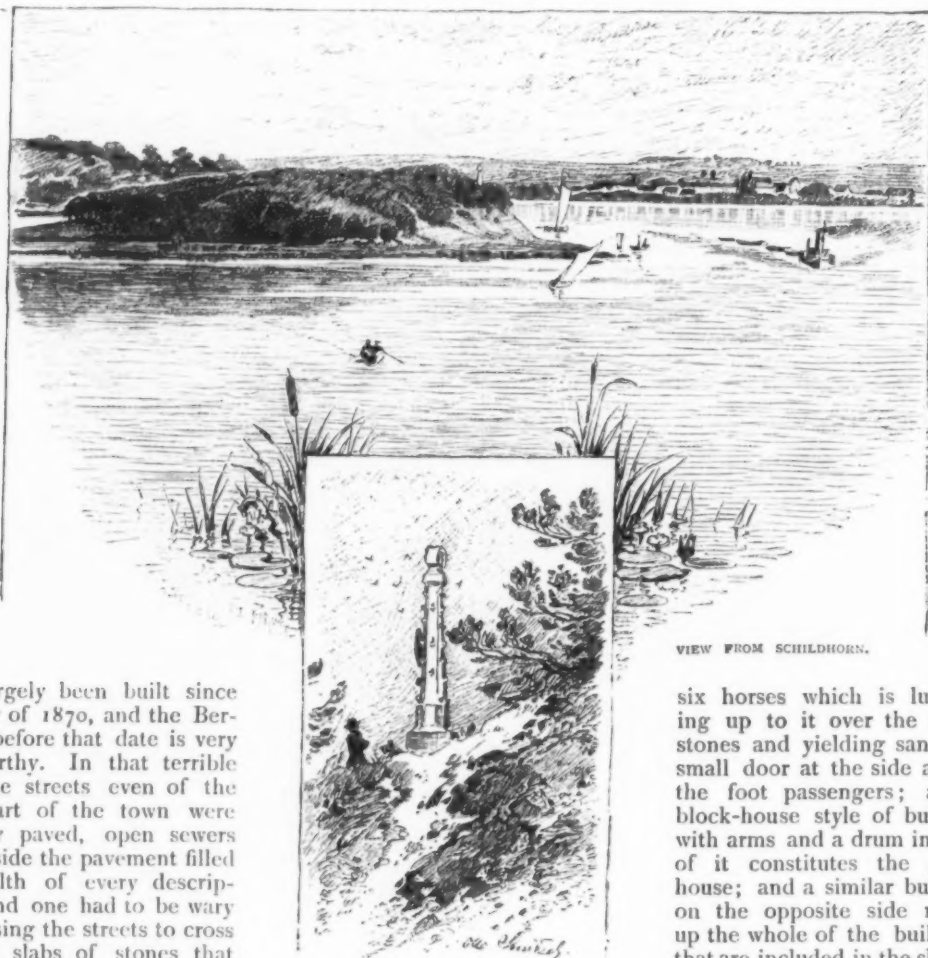
pean celebrity, and whose rooms on the fourth floor were crowded artistically with choice gems of art and literature, and who broke off a pleasant conversation with the excuse that he had an appointment with the Crown Prince, and could the writer meet him again in the afternoon? The other a poor struggler on the very bottom rung of the ladder of fame—one whose pale, thin cheeks spoke of slight and unfrequent meals, and who was forced to part with his work, clever and artistic as it was, for bread-money. He also lived on the fourth floor, whilst below him lived a baron, and he pleaded as an excuse for the many stairs his poverty.

Those who are engaged in the arts and sciences or education dwell in a different part of Berlin, or otherwise their lives much resemble that of the workmen, both in their mode of living and in their amusements; but their homes bring us back again into the parts more frequented by foreigners and tourists, and beneath the shade of the remnants of the forests that have been left to beautify new Berlin.

In these districts that surround the Thiergarten, with its picturesque little lakes and bridges, such as the Lion's Bridge in our illustration, the streets are long lines of magnificent boulevards, with handsome artistic houses, often with good carving, and at the corners well-

appointed cafés, that are on Sundays and holidays and in the evening crowded with customers. The contrast of this part of Berlin, that

trated by an old sketch of this gate in the year 1760. A narrow gate with a couple of pillars just wide enough to admit the carriage and



VIEW FROM SCHILDHORN.

has largely been built since the war of 1870, and the Berlin of before that date is very noteworthy. In that terrible year the streets even of the best part of the town were horribly paved, open sewers ran beside the pavement filled with filth of every description, and one had to be wary in crossing the streets to cross on the slabs of stones that were placed to allow passers to step over these drains. At night the stench arising was terrible, and Berlin was one of the most unhealthy towns in Europe. The sanitary matters in hotels were of the most primitive and awful mode, but since 1872 "we have changed all this."

All the best streets are now of asphalt. An entirely new system of drainage for the whole city has been carried out at an enormous cost, and no open drains are seen, but great sewers carry the refuse of the city far away out to the middle of the Luneberger Haide, where sewage farms have been established. In all the new streets trees have been planted or left standing, and tram-lines traverse the town in all directions, whilst the interior arrangements of hotels and houses are now scientifically carried out, and thus Berlin has become a pleasant town.

The Brandenburg Thor is the principal exit from the town to the pleasure part of the Thiergarten, and the rapid growth of Berlin is illus-

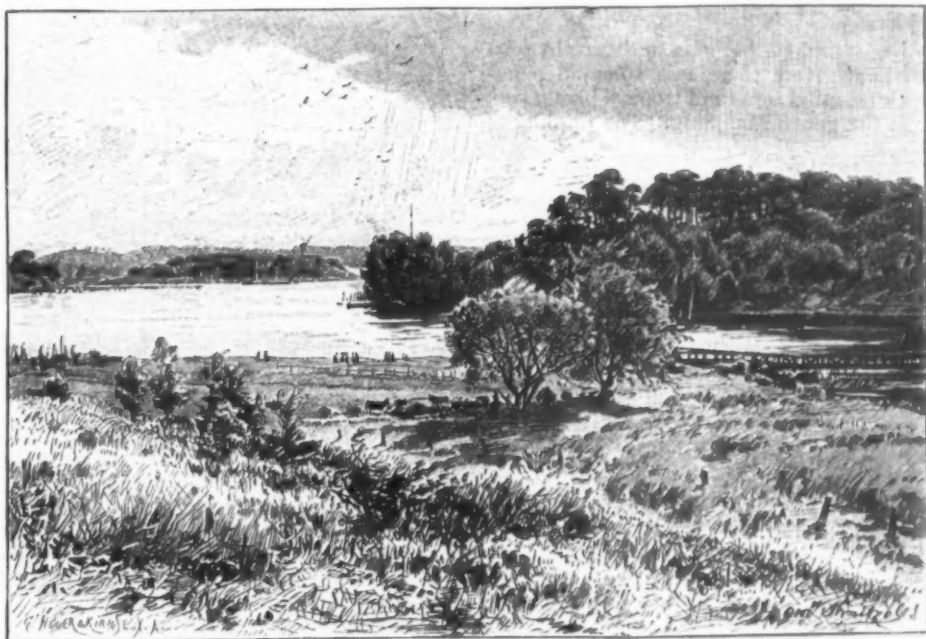
trated by an old sketch of this gate in the year 1760. A narrow gate with a couple of pillars just wide enough to admit the carriage and

truly has it been said "Berlin is the work of the Hohenzollerns," and a marvellous and rapid work it has been.

The whole of the district outside this Brandenburg Thor is largely devoted to pleasure, and under the shade of the trees of the Thiergarten are laid many a pleasure resort. The theatre and garden of Kroll, not far from the great Victory column, is still a great haunt for the music-loving Berliner. Here a magnificent band plays good music, and in the theatre of the garden a well-played opera may be seen, and either under the trees or in the hall a well-cooked supper be dispatched. Farther on in the depths of the Thiergarten is the zoological garden, where also good music may be enjoyed to the accompaniment of good eating, and the animal world be well studied, for, amidst some lovely gardens charmingly arranged (in spite of the fact that nought but flat

sandy plain was there to work upon), are some of the finest specimens of wild animals that perhaps the world possesses. The elephant house is a magnificent Eastern building, doing duty as a palm house and winter garden.

farther afield (or rather remembering the sandy plains, "adesert") on to Charlottenburg, and to Spandau even, are numberless places where the Berliners enjoy themselves, and where the brighter side of Berlin life may be studied.



ISLAND OF PICIRLSWERDER.

At all these popular resorts the student in Berliner dialect would do well to listen to the conversation around him.

At first he would almost conclude that he was listening to some language at least not German, but with a few keys, such as noting the soft *g* where he has generally considered it should be hard, the *r* as *d*, the *ff* as *p*, the *b* for *j*, etc., the words soon assume a meaning to his ears. The favourite saying of the Berliners to illustrate their pronunciation is one that also illustrates their tastes.

"Eine Jute Jebratene Jans und ein juter jurken Salat ist eine Jute Jabe Jottes." (A good roast goose and a good gherkin salad is a good gift of God.) Pronounce "salat" as zoll-ot, and in this saying a very good key is obtained to the Berlin dialect.

It is a mixture of High and Low German, and "sundries" picked up from anywhere—French, Italian, English—and either with an affix or prefix turned into a genuine Berlin word.

Their sayings are often very amusing and suggestive. The hint to any one to "Machen se de Dühre von Draussen zu," to "kindly shut the door from the outside," is sufficiently suggestive; or the hint that "no one can be too careful in the choice of his parents" is not without meaning in a city of parvenus.

Throughout this district of the Thiergarten and

Our view of Spandau, with its quiet river and large-sailed barges, gives a very different idea of the town to that which the traveller who enters from the land side would have of it.

High massive walls and bastions, with moats wide and deep, wooden drawbridges ready at a moment to be withdrawn, and troops on all sides, quickly prove that Spandau is a fortress of the first rank. And a highly important rôle it plays in Prussian history.

At this moment it guards in the Julius Tower the "chest" of ready cash that the Government always holds in readiness for war. Forty millions in gold, a part of the indemnity which France paid to Prussia, lies packed away in this tower, lies uselessly, and earning no interest, but lies waiting for Prussia's hour of need; so well may Spandau be well guarded.

Not far from Spandau is a spot endeared to all lovers of nature, and one well worthy of a little pilgrimage, for here in the park of the Chateau of Tegel lie the remains of the great naturalists, William and Alexander von Humboldt. The little family cemetery is surrounded with graceful birch-trees, and dark pines and cypress-trees closely intertwining one with the other. At the back of the principal monument runs a stone seat offering a quiet place for reflection upon the work of Thorwaldsen that surmounts the monument—the figure of Hope

This quiet resting-place, so strongly in contrast to the gay crowds that throng the gardens in the Thiergarten from which we have wandered, but forcibly illustrates German life, for many of the frequenters of these gardens are deeply read and studious men, yet always able to throw off their working life in the presence of good music or picturesque nature.

One of the gardens perhaps most worthy of a visit is Flora. Here there is a splendid palm-house with beautiful ferns and tropical plants kept apart from the general building. The rippling of

fastidious may enjoy. The drive back from Flora to Berlin through the quiet, silent forest is not an unpleasant ending to a Berlin day.

Music is one of the great attractions of Berlin, be it vocal or instrumental, light, classical, or



THE LION BRIDGE.



MONUMENT TO
QUEEN LOUISE.

the fountain and the delicious odour from the plants make this house pleasantly agreeable, whilst adjoining it is a great hall for the winter concerts, and outside a lovely garden all laid out with beds of the choicest flowers, the little River Spree looking picturesque perhaps in the moonlight, as it winds amongst the avenues of trees. These are lit by many varied lamps of every hue, that are reflected in the sparkling, rippling fountains. Add to this music of the highest order, and here is a resort that the most

military, and would but our holiday crowds learn from the Berliner that far higher enjoyment is gained by singing in harmony than by yelling in what we may not call unison!

Passing from the outside resorts to within

the Brandenburg gate, a pleasant place to hear some excellent music is the great glass hail of the Central Hotel. This covers the space that was formerly the Stad Parc, a spot noted for its concerts and suppers; and now, under the shelter of glass, amidst lights, and palms, and fountains, the music of some of the finest bands of Europe may be heard, conducted perhaps by the most celebrated composers of the day. To enjoy the music here, a seat near the orchestra should be taken, as the hall is

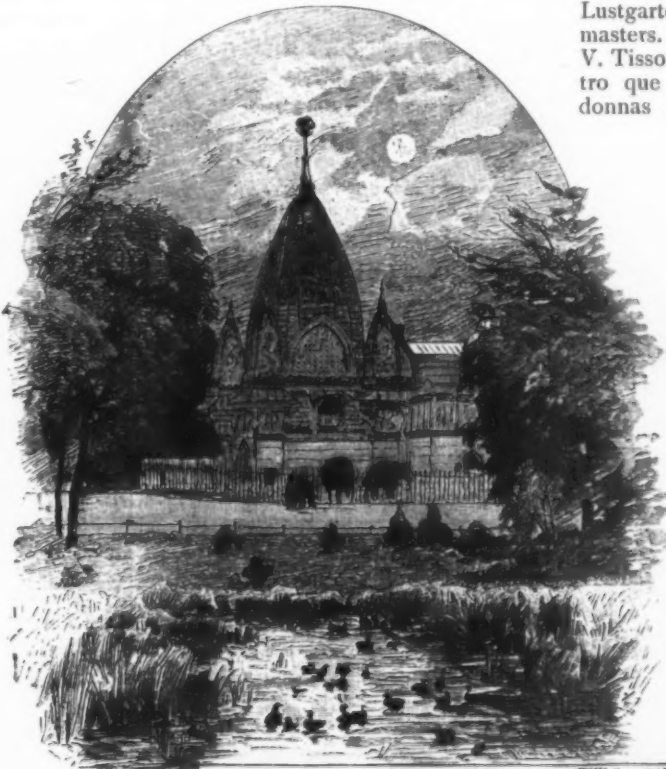
so vast that the delicate *morceaux* are not heard at a distance.

The singing unions of Berlin are very nume-

the short run to Berlin. But the royal gallery of Berlin is as worthy of a visit as the picture gallery in the Zwinger of Dresden.

The great building of the old museum that bounds one side of the Lustgarten is filled with pictures by old masters. No longer can it be said, as V. Tissot wrote in 1875: "Ils auraient tro que une demi-douzaine de Madonnas de Raphael contre un grenadier de six pieds" (They would exchange half a dozen Raphaels for one six-foot grenadier). And the great building which has arisen behind this of the new museum is being filled by pictures from great living masters, whose work is full of intense vigour and action, expressive of the energetic life in modern Germany.

The great names of Kaulback, Becker, Cornelius, Defregger, Ittenbach, Knaus, Knille, Schroeder, some of whose finest works appear in this gallery, prove that if Dresden should be visited for the old masters in the Zwinger, Berlin claims a visit for the masterpieces of artists of to-



ELEPHANT HOUSE,
TIERGARTEN.

rous, but to hear vocal music the most delicately rendered the "Singakademie" should be visited.

The true Berliner will spend his money freely for his amusement, but he must have some good music; and truly Berlin abounds with good music, whether it be rendered by an artisans' vocal union or by the picked company at the Royal Opera House.

For the sister arts of Painting and Sculpture Berlin should also be visited. Of the thousands of tourists who visit Dresden scarcely ten pass on



BY THE GOLD-FISH POND.

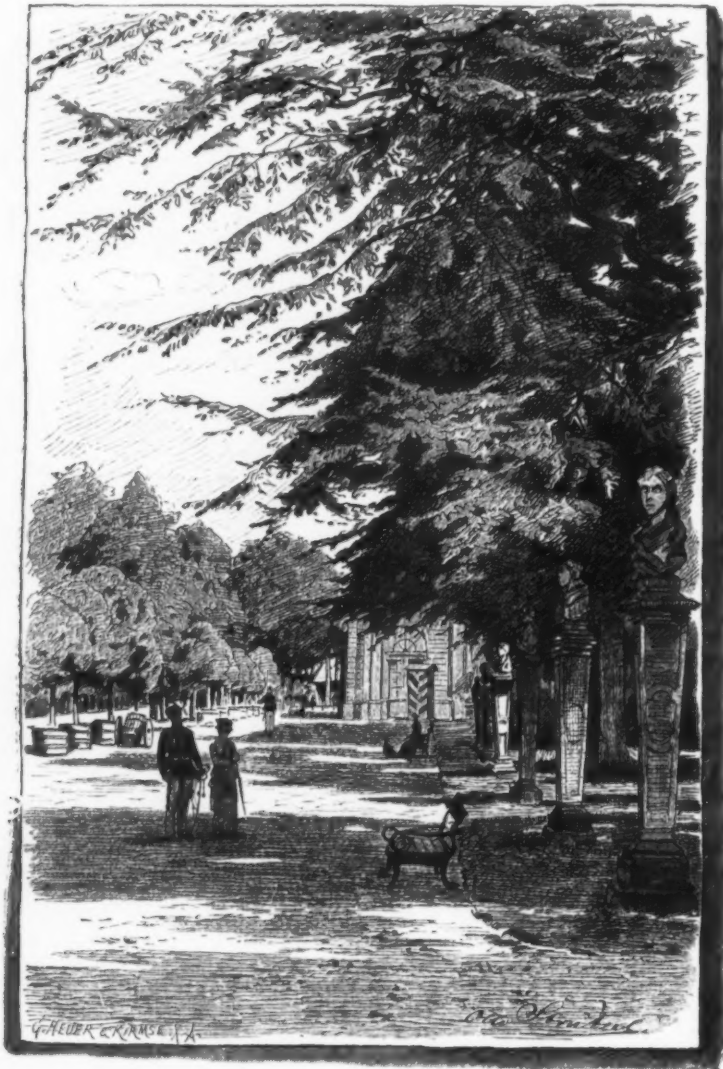
day, whose work is more true to nature, more human, and oftentimes more soulful than that of some of the great pictures of the old masters. Battle pieces in this gallery are unfortunately too numerous, but it is a suggestive sight to see squads of young soldiers told off to go the round

of the gallery, probably with the intention of adding to their military ardour. The intense egotism of the Germany of to-day shines forth clearly in these pictures, and perhaps nowhere more conspicuously than in the picture of "The Entry into Jerusalem of the Crown Prince."

One of the most striking pictures of the collection is the Flooded Landscape of Scheres. The marvellous effect of light bursting through a grey

mass of cloud upon the waste of waters is wonderfully treated; the subject is so slight, and yet a masterpiece is produced from it. No one who would understand modern art should miss a visit to this gallery, and if but for this visit alone there are few cultured travellers who would regret a visit to Berlin and the Berliners.

JAMES BAKER.



IN THE CASTLE GARDEN, CHARLOTTENBURG.

RATIONAL FEEDING; OR, PRACTICAL DIETETICS.

BY A. WYNTER BLYTH.

IV.—DIGESTION AND INDIGESTION.

A MASTER of language wrote "The Philosophy of Clothes," and left to smaller minds the consideration of that first necessity of nature—"food." If the importance of a subject be the measure of its necessity, then food stands before clothing. Certain tribes in hot countries like Africa, and in cold like Patagonia, have no clothing to speak of, but where in the whole world is there existence without food? Food is a kind of inward clothing. The frost chills a lean, hungry body, though cased in fur, but a well-lined capon enwrapped in an ill-lined cloak, shivers not at the breath of winter. The body assimilates and masters food, turning the food into itself. Thus it is that the nature of the food itself has but little influence on the genius, disposition, and affections of the individual. Feeding on the meat of the bear makes no man brutal, of the deer makes no man swift, nor is gentleness and humanity to be produced in children by feeding them on doves. All this is well. Were it otherwise, what responsibility there would be in the nurture of the young! Each person's future career would have to be fixed at an early age, so that appropriate feeding might produce appropriate mental and bodily qualities. A child destined for the army might have to be fed on the blood and brains of ferocious beasts, and a legislator on dishes spiced with pepper and curries, to impart that acrid heat of expression which modern debates seem to require.

Though the essential nature of man—that which is born in him—cannot be changed by food, temporary, irritable, and ill-conditioned mental and bodily states are easily produced by errors in eating and drinking.

The biliousness of despotic monarchs has cost many a slave his head, and the destiny of a nation has been modified by the dyspepsia of its statesmen. If the remote as well as the immediate effects of indigestion be traced out, it will be found to have caused a greater sum of misery than plagues, famines, or earthquakes.

Sage, trite maxims for both the cure and prevention of dyspepsia are plentiful, but good results, whether from legitimate or quack nostrums, are rare. As there are fine shades of feature distinguishing one man from another, so would it seem that there are minute differences and individual peculiarities in the digestive organs which are not to be modified or corrected by general rules.

Consider what a piece of refined chemical and biological art it is to transform a Christmas dinner of roast beef, plum-pudding, bread and vegetables, into a fairly homogeneous fluid, most of which is capable of entering into minute microscopical channels and of being conveyed to the circulation; how albumin is made soluble and

turned into a form easily transuding through animal membranes; how the fat is emulsified; how the starch changed into sugar. Consider the transitions, the pulling down, the building up, the degradations, the new formations—all in a living tube of but twenty-five to thirty feet long. Then wonder that the matter is for the most part done so silently, automatically, and pleasantly.

"Know thyself"—a pithy sentence, originally uttered for the purpose of inculcating on every one the desirability of justly estimating his own mental powers—may be expanded and paraphrased into, "Know thy own digestion, its capabilities and weaknesses." Such a knowledge will spare many a stomach—and, for the matter of that, many a heart—ache. The lean and hungry Cassius who sleeps not at night and thinks too much is a dyspeptic Cassius, and the sleek-headed, easy-going, laughter-loving soul is one who has a good appetite, and satisfies it without discomfort.

Putting on one side gastric diseases and weaknesses which arise from the excessive use of stimulants, one of the most common and unpleasant sensations of dyspeptic people is a feeling of distension in from half an hour to an hour after a meal. This distension is produced by gases.

Fermentation, putrefaction, and digestion are all closely allied, and they are all normally attended with the evolution of various gases. The amount of gas possible to be produced from the ordinary daily diet of an adult man amounts to many cubic feet; but healthy, vigorous digestion never produces any inconvenient quantity. It is otherwise in certain abnormal conditions, in which the food rather putrefies than digests. In extreme and rare cases of this kind gas has been evolved in such quantities as to threaten existence.

The gases to be found in the intestinal canal are irrespirable; they contain no oxygen. The chief of the gases is the choke-damp of the miner, together with marsh gas, nitrogen, and small quantities of sulphuretted hydrogen. These gases, when developed in small quantities, are to a considerable extent absorbed into the blood and exhaled by the lungs. A German observer has lately proved this to be even true of the inflammable gases, such as marsh gas.

The digestion of well-boiled potatoes, of carrots, of bread, of butter, of fish, of meat—takes place with very little development of gas. On the other hand, cabbages, and fibrous vegetable matters generally, necessarily produce marsh and carbonic acid gases. Eggs also give up their sulphur in the shape of sulphuretted hydrogen when the albumin has passed into the intestine.

The practical conclusion to be drawn by those who suffer from dyspeptic distension is to reduce to a minimum the substances already enumerated which give rise to normal flatulence.

It is not enough that in the air-borne dust, in the vapour from sewer and ditch, and in the contact with the animal world, disease may be carried to us; but it seems that our own juices may become poisonous, and the fluids which should give life kill by their rankness. Dr. Brieger has lately shown that meat treated with gastric juice, and kept for some little time at the temperature of the body, develops in small quantity a poisonous substance. This has been separated in a definite crystalline form, and is evidently allied to the class of organic bases which have been extracted from decomposing animal and vegetable matters, and have been given the generic name of "Ptomaines."

The complicated and diverse sensations experienced in what is popularly known as a fit of violent indigestion may therefore be due to an evil fermentation turning food into poison. The sickness and diarrhoea of indigestion may be the effects of a self-produced acrid ptomaine; sleepiness and heaviness of a narcotic, opium-like ptomaine; bad dreams, nightmare and ghostly visions of an atropine-like ptomaine, causing disorders of the special senses.

Said Scrooge to the shade of the dead Marley, "You may be an undigested bit of meat, a blot of mustard, a crumb of cheese, a fragment of an underdone potato"—a whimsical list of possibilities, in which the great novelist happily hits at the basis of not a few supernatural manifestations.

V.—ARTIFICIAL DIGESTIVES.

Two professions, having otherwise but little in common, have unconsciously co-operated in the prolongation of human life—the dentist supplying to edentulous gums artificial teeth; the chemist strengthening feeble secretions by artificial digestives.

Modern art has indeed separated several principles from the animal and vegetable world which have very special and peculiar powers of transforming and dissolving up both albuminous and vegetable matters when allowed to act upon them under certain conditions of temperature.

These principles may be divided into three classes—viz., meat solvents, starch solvents, and fat emulsifiers.

The meat solvent longest known is pepsin—as quinine is the active principle of bark, aconitine of monkshood; so may pepsin be said to be the active principle of the stomach. He who buys an ounce of pepsin has bought the digestive powers and virtues of many stomachs. Pepsin has never been prepared in a perfect state of purity, the very best samples always containing traces of other substances. To find out whether a particular pepsin is active it is only necessary to dissolve a little of it in water, to add a drop of hydro-chloric acid, and then a small piece of the boiled white of an egg, keeping the temperature of the whole at about 100° F. If the sample be

good, the albumin in the course of half an hour will have wholly disappeared. Pepsin is not the only meat digester, several substances possessing properties nearly allied to pepsin having been discovered. One of the more interesting of these is "Ingluvin," extracted from the fowl's crop. The meat solvents are not confined to the animal world; the so-called "carnivorous" plants have gastric-juice-like fluids, which dissolve the bodies of the killed and entrapped insects, forming solutions which possibly nourish the plant.

The most powerful of all these food solvents is the juice of the papaw-tree, of which wonderful stories have been told. Thus Browne, in his "Natural History of Jamaica," says that meat becomes tender after being washed with water to which the juice of the papaw-tree has been added, and if left in such water ten minutes it will fall from the spit while roasting, or separate into threads while boiling.

Within the last few years "Papain," the active principle of the plant, has been separated and carefully studied. It is in the form of a snow-white powder, very soluble in water, and possessing some remarkable properties.

One part of papain dissolves a thousand times its weight of fibrin, and instead of, like pepsin, acting only in acid solutions, it acts equally well in alkaline solutions. Kühne has shown that pancreatin destroys pepsin, so that the joint action of the two is not possible; but with papain it is different, papain and pancreatin may exist together and co-operate, each exercising its own peculiar functions. Added to this, papain seems to be a weak antiseptic, for meat moistened with a solution of papain keeps much longer than meat moistened with water. Time has not sufficed to ascertain whether these successful laboratory experiments are borne out in actual practice; if they are, then papain will be the most powerful digester known.

The starch solvents are scientifically known under the generic term of "diastatic ferments;" their type is "diastase," a substance extracted from malt, and contained in malt extract. Diastase has the property of transforming starch into a kind of sugar. If, for example, a little diastase or good malt extract be added to a thin solution of potato starch, the solution being kept at blood heat, in from fifteen to twenty minutes the previously somewhat turbid solution becomes clear and limpid, and will no longer give a blue colour with iodine, which is a proof that all starch has disappeared, and further chemical tests will show that it has been changed into sugar.

The type of the fat emulsifiers is pancreatin, which is a substance extracted from the pancreas, or sweetbread, and has the property of acting on fatty matters and preparing them for digestion.

In these principles, then—pepsin, papain, and ingluvin for meats; malt extract for bread, biscuits, vegetables; and pancreatin for fats—we have agents which when added to food kept at a suitable temperature outside the body imitate the action of natural secretions inside the body. The feeble digestive powers, both of old people and of very young children, can by their aid re-

ceive considerable assistance. But it is scarcely necessary to say that artificial digestion is never precisely similar to natural, and that it is not yet possible and never will be for anxious busy men avaricious of time spent in eating, to convert their necessary supply of albuminoids into peptones, of starches into sugar, of fats into emulsions—to drink a dinner at a draught and give no work for the salivary, peptic, or intestinal glands to do. All that can be reasonably expected is that just as an inflamed eye is kept from the light, so in acute dyspepsia the sick digestive organs may be given some little repose by the work being done outside, and that in congenital weakness and cases of senile feebleness partially digested nourishment may in this way be taken which in any other form would not be assimilated.

The application of physiological chemistry has been especially happy to "infant's foods." There was a time when thousands of unfortunate babies were literally starved to death by being crammed with various flours and powdered biscuits, which putrefied in the intestines, causing diarrhoea and other maladies. The best infant's foods are now "malTED," that is, either mixed with ground malt or malt extract. On adding lukewarm water or milk to such foods and keeping them warm (not hot) for a few minutes, chemical transformations go on which serve excellently as a preparation for natural assimilation.

VI.—AVAILABLE AND LOCKED-UP NUTRIMENT.

The terms digestible and indigestible foods in a popular sense refer to the easy or uneasy sensations of the person taking the food; while in a physiological sense the amount of nutriment given up in the slow passage of the food downwards from the mouth through the canal is considered, or, as I have elsewhere expressed it, "digestible foods are those in which small solid residues leave the body, indigestible foods are those which yield large solid residues."

It is hence evident that digestibility is almost synonymous with solubility. A food like sugar readily dissolving in water being the type of the most easily digestible, while at the other end of the scale are completely insoluble substances, as for example the diamond (often enough swallowed for purposes of theft or concealment), and which, of course, can in no way be assimilated.

As the value of coal is determined by the amount of matter which gives heat and light, the ash being considered waste, similarly the residues passing from the alimentary canal are so much waste or ash, and have to be subtracted from the total weight of the food consumed. Science has been enriched by a number of researches which have had for their object the estimation of available as distinguished from apparent nutriment. The method of experiment has been various; much has been learnt by submitting edible substances, both raw and cooked, to the action of solutions of pepsin, pancreatin, and other digestive principles at the heat of the body and ascertaining the solvent effect. But by far the most valuable information has been gathered from

careful analyses of the "income and output," *i.e.*, of the food going into the body and the food residues (excreta) going out of the body.

The following short table will impart some idea as to the available nutriment found in a few common articles of diet. It gives the amount of waste left from 100 parts of any particular food as determined by experiment—*e.g.*, of 100 parts of rice 96 are digested, while of 100 of gelatin only 50 are subservient to nutriment.

AMOUNT OF SOLID FOOD RESIDUE PASSING AWAY FROM THE BODY BY THE ALIMENTARY CANAL.

Rice	4'00
Wheaten Bread	5'00
Roast Meat	4'20
Hard-boiled Eggs	5'25
Corn Flour	6'70
Milk 730 parts of fluid to 100 solids	9'00
Potatoes	9'40
Rye Bread	11'1
Black Bread	17'0
Carrots, Celery, Cabbage	24'0
Peas, Beans, etc.	47'6
Gelatin	50'0

Such physiological researches correct largely the conclusions which would otherwise be drawn from mere analysis. Take as an example the strong opinions held by some very well-intentioned people as to the superiority of whole-meal bread over ordinary bread—opinions entirely based upon chemical analyses made in the early stages of scientific food lore, in which no distinction was made between the nitrogen which can be digested and the nitrogen which escapes. Whole-meal bread is a pleasant food, and yields to chemical analysis a higher percentage of nitrogen than white bread; but when equal weights of the ordinary and the whole-meal are passed through the body itself, 95 parts of the "white," and about 90 parts of the "whole-meal" disappear, the residue from the latter containing much nitrogen that is wholly insoluble; hence when submitted to this crucial test it is at once evident that 105½ parts of whole-meal bread will have to be eaten to equal 100 ordinary bread. This proportion once obtained, the superiority of one above the other as food for the people is to be judged from a different standpoint—such as the price of the two kinds of bread, and any other properties they may possess.

VII.—THE TIMES AND MANNER OF FEEDING INDICATED BY PHYSIOLOGY.

Another series of carefully arranged experiments have had for their object the determination of the length of time occupied by digestion. Some were made, many years ago, on an unfortunate Canadian, who, having a wound leading into his stomach, was at the time an object of much interest to the physiologists, who used to poke through the opening various foods, and after a little time remove them. A recent, more accurate, but very unpleasant method has been to operate upon healthy persons, getting them to swallow weighed pieces of meat, and then remov-

ing at different intervals of time the residues by the aid of the stomach-pump.

It requires very little knowledge of the digestive process to understand that since the stomach practically only digests meaty substances, these observations but teach us something of the changes going on in a small portion of the digestive tube; by far the greater part of the work being effected in the small intestine where the food is submitted to a variety of solvent juices of a complicated composition; nevertheless, the results as far as they go are interesting, and they bear on that important question—How often a man should feed?

There is a difference in the time of digestion between one meat and another, and between different conditions of the same meat. Raw beef disappears from the stomach in about two hours, the same beef boiled takes three hours, while thoroughly roasted beef is not digested until four hours have elapsed. If the different varieties of meat are arranged in the order of time in which they disappear, their order of solubility will be something as follows—

BOILED.			
Tripe ...	...	1	hour.
Turkey...	...	2½	hours
Beef ...	...	3	"
Mutton ...	...	3	"
Fowl ...	...	4	"
Pork ...	...	4	"
ROAST.			
Venison ...	...	2	"
Goose ...	...	2½	"
Mutton ...	...	3½	"
Fowl ...	...	4	"
Beef ...	...	4	"

When it is considered that meats of all kinds are digested quicker than vegetable foods, it is pretty clear that an ordinary meal, whether it be breakfast or dinner, will not be fully digested under six hours; therefore if breakfast should be at 8 a.m., the system, physiologically considered, requires nothing before 2 p.m., and a third meal will not be necessary before 9 p.m. The activity of business and professional men is mainly exercised between ten in the morning and five in the evening; a midday meal involves loss of important time to such persons; a hearty breakfast and a "snack" in the middle of the day, with a good six o'clock dinner, is a common-sense system of feeding which agrees well with the majority.

I have nothing to say in favour of the old four daily meals—breakfast, dinner, tea, and supper. Besides the waste of time, the organs are never permitted to rest; before one load of pabulum is disposed of, down comes another on top of the first. Soups and sauces, sweets and bitters, hot drinks and cold, surfeit the mucous membrane. The great glands, fatigued with the never-ceasing work, are liable to strike and take themselves the repose which has been denied.

Simplicity of diet has been preached; the prophet eating the locust bean and wild honey—the Hindoo with his rice—nomad races living on cheese, milk, and goat's-flesh, have been held up as examples worthy of all admiration. The poor, the uncivilised, and those who would rend the body for the soul's faults, use, from necessity or choice, simple diets; but as a rule when man can get a complicated diet he eats it. A man in this climate to do what he has to do well, requires to have at least twice a day a certain amount of complicated pabulum floating down the intestinal canal, and the amount must be a little in excess of what the body requires. The reason why the diet should be of a complex character is because if several kinds of albuminous matter are present and one fails to be digested another succeeds; if several kinds of fat are present, if one is unabsorbed another is taken up. And the reason why there should be an excess of nourishment taken is because the digestive organs are never perfect; there is always waste.

It must not be too rashly concluded that because those persons are as a rule in the best state of physical and mental health who take a generous diet, who eat of many kinds of meat, of many kinds of vegetables, and several varieties of starches, that the sumptuous banquets of public and private hospitality are beneficial. Quite the contrary. Here complexity reaches an absurd and dangerous excess. The eye, the nose, the ear, and the palate, dazzled with fair sights, stimulated by delicious odours, charmed with music, and vitiated with variety of flavour, are all submitted to such a mitrailleuse of temptation that only strong-minded persons can resist taking very much more both to eat and to drink than is either necessary or good. Here, as in most other things, the middle course is the safest—to eat, not to gorge; to drink, not to swill; to aim at satiety, not repletion.

CURIOSITIES OF MUSIC.

II.—WORKING WAYS OF GREAT COMPOSERS.

THERE are some who look upon a production of genius as a sort of conjuring trick which they could imitate were they only shown how it is done. To such the following notes on the working habits of great musicians may prove of value, even though they are not thereby advanced

much in the direction of becoming eminent composers on their own account.

Other people desire for a far better reason to know how famous men pursue their labours: they see that there are happy methods in work, an acquaintance with which is often of real service.

It is not only to the composer that the composer is in this way interesting; the literary man may learn of him; so may the artist; so may—to a greater or less extent—the laborious brotherhood in every line of life.

But a fig for reasons, says a third class; give us information for information's sake. Even though some of the facts you furnish be little more than gossip, let us console ourselves with the reflection that to gossip comes natural to humanity, and that it is better to be talking about great men than about nobodies in the next street.

We begin with the composer of the "Messiah," the most eminent musician who ever made his home in England. The remarkable feature about the working habits of Handel was his rapidity: he wrote sometimes indeed in feverish haste. His immortal oratorio "the Messiah" was written in twenty-four days, the composition being commenced on the 22nd of August, 1741, and completed on the 14th of September. No more industrious musician ever lived, and his industry, united with great powers of concentration and a wonderful fertility of ideas, enabled him to perform feats which appear almost impossible.

How he entered into the spirit of his work has been often told, and many of us have in imagination stood beside him whilst in tears he wrote "He was despised," or penned the "Hallelujah Chorus," as if—so he himself says—before the opened heavens and in presence of the great Ruler of the universe.

His musical ideas were frequently set down on paper without the necessity for a single correction, but some of his MSS. are so blotted with alterations and after-thoughts as to be hardly decipherable. In the case of the "Messiah" he made extensive changes after the work was first written, and as the original score has been published in facsimile these may be studied by all interested in the subject. Like every great artist he seems to have been a stern critic of himself.

Haydn, like Handel, was industrious, but speed was foreign to his temperament, and to his industry alone we must give credit for the great number of his compositions. "I never was a quick writer," he tells us, "and always composed with care and deliberation: that is the only way to produce works that will last, and a real connoisseur can see at a glance whether a score has been written in undue haste or not."

He was regular and methodical, as one might guess from his works, which are models of clearness and symmetry. He rose early, dressed very neatly, never sitting down to work till he was fully dressed, and used to write at a little table by the side of his piano. When any very particular composition was on hand he liked to wear a ring given him by the King of Prussia.

His MSS. are remarkably neat, with few corrections. "I never put down anything," he says, "till I have quite made up my mind about it." At the beginning of all his scores, large and small, stand the words "In nomine Domini," or "Soli Deo Gloria," and at the end "Laus Dec." indications of the religious spirit in which all his

work was carried on. "When I was occupied upon the 'Creation,'" he writes, "always before I sat down to the piano I prayed to God with earnestness that He would enable me to praise Him worthily." A good deal of superstition, however, was apparently mingled with his devotion: whenever he felt the ardour of imagination decline, or when he was stopped by some difficulty, he used to rise from the piano and run over his rosary—a plan, according to his own account, which was never found to fail.

The method of composition followed by Mozart has been described by himself. Writing to one of his friends, a noble amateur, he says: "When I am, as it were, completely myself, entirely alone, and of good cheer—say travelling in a carriage, or walking after a good meal, or during the night when I cannot sleep—it is on such occasions that my ideas flow best and most abundantly. Whence and how they come I know not, nor can I force them." He then tells how he retains the themes that please him, humming them over sometimes to himself, as he works them up mentally into a finished composition, hearing all the parts at once in his head; and how, when this is accomplished, the mere committing to paper is done with ease and rapidity. When writing down what was already stored up in memory, it did not matter what was going on about him—he could even take part in conversation.

We see Mozart engaged in the process of transcribing on the evening preceding the first performance of "Il Don Giovanni." The overture to that famous work was indeed composed, but it had not been written out, as he wished to reconsider it. He had a habit, too, like many of us, of putting off things till the last moment. He began his task at eleven o'clock at night, having got his wife to make him some punch, and engaged her to sit by him to keep him awake, for he was worn out with the fatigue of conducting the general rehearsal. He wrote whilst she told him all the Volksmärchen she could remember, he sometimes laughing at her droll stories till the tears ran down his cheeks. As his work was almost purely mechanical her talk was no interruption, and when the copyists appeared in the morning the score was completed, from which the overture was played that evening, without correction and without rehearsal.

This style of working satisfactorily explains some of the tales told about Mozart's marvellous rapidity, such as his feat of writing for himself and the violinist Brunetti a sonata in sixty minutes. It is not so difficult to astonish people when the miracle of the moment is prepared beforehand.

Fortunately for art, we know a good deal about the working habits of Beethoven; and, thanks to the collection of sketch-books he left behind him, can see the first germs of many of his greatest productions, and trace their gradual development.

When an idea struck Beethoven he at once wrote it down; and to contain such memoranda he kept oblong books, each containing about two

hundred pages of large coarse music paper, sixteen staves to the page. Such at least was their usual description. One of these books even lay by his bedside to receive anything that occurred to him during the night, for he seems never to have trusted his memory. At his death there were over fifty of these manuscript volumes in existence.

No one has estimated more truly the value of these books, or pointed out their interesting features with greater clearness, than Sir George Grove. "They are, perhaps," he says, "the most remarkable relic that any artist or literary man has left behind him. They afford us the most precious insight into Beethoven's method of composition. They not only show—what we know from his own admission—that he was in the habit of working at three and even four things at once; but without them we should never realise how extremely slow and tentative he was in composing. Audacious and passionate beyond any one in extemporising, the moment he takes his pen in hand he becomes the most cautious and hesitating of men. It would almost seem as if this great genius never saw his work as a whole until it actually approached completion. It grew like a plant or tree, and one thing produced another. There was nothing sudden or electric about it, all was gradual and organic, as slow as a work of nature, and as permanent. One is prompted to believe, not that he had the idea first and then expressed it, but that the idea came in the process of finding the expression. There is hardly a bar in his music of which it may not be said with confidence that it has been rewritten a dozen times. . . .

"It is quite astonishing to find the length of time during which some of his best known instrumental melodies remained in his thoughts till they were finally used, or the crude, vague, commonplace shape in which they were first written down. The more they are elaborated the more fresh and spontaneous do they become."

Beethoven's time for completing his compositions at the piano, and writing them down either for performance or publication, was the early part of the day. When thus engaged the noise he made with his playing and shouting was something to be remembered. Whoever interrupted him at such times met with the rudest possible reception. After dinner, which was served about noon, he took his walk, thinking over his work as he went, and making his notes in pencil to be inked over on his return home. It was in his lonely rambles amidst the beautiful scenery in the neighbourhood of Vienna that some of his grandest compositions were first conceived and sketched.

From one who, it has well been said, is in music what Shakespeare is in poetry, we pass to a genius of a very different order—the composer of "The Barber of Seville" and "Guillaume Tell." When forced to work, Rossini wrote with great rapidity. His "Barber" was composed—and, more than that, was mounted—in a month. Some one told Donizetti that Rossini had written it in thirteen days. "Very possibly," was the reply;

"he is so lazy!" The famous air, "Di tanti palpiti," in "Tancredi," was dashed off whilst the composer was waiting for a dish of rice, and on that account was long known by the nickname of the "aria de' rizzi."

A curious letter was published some years ago written by Rossini to a young artist who had consulted him as to the best way of composing an overture. Its gaiety is very characteristic. "Wait," he says, "till the evening before the first performance. Nothing excites inspiration like necessity; the presence of a copyist waiting for your work, and the view of a manager in despair, tearing out his hair by handfuls. In Italy all the managers in my time were bald at thirty!"

"I composed the overture to 'Othello' in a small room in the Barbaja Palace, where the baldest and most ferocious of managers had shut me up by force with nothing but a dish of macaroni and the threat that I should not leave the place alive till I had written the last note!"

"I wrote the overture to 'Gazza ladra' on the day of the first performance, in the upper loft of La Scala, where I had been confined by the manager under the guard of four scene-shifters, who had orders to throw my text out of the window bit by bit to copyists who were in waiting below to transcribe it. In default of music I was to be thrown out myself."

For nervous anxiety about his compositions no one will be found to match Meyerbeer. The author of the "Huguenots" made work a painful process; he altered, corrected, deleted, inserted, and rewrote in a way which—had we not examples both in music and literature to the contrary—would suggest the manufacturer rather than the inspired artist. The rehearsal of his compositions was marked by the same fastidious spirit. He would give the orchestra passages scored in different ways, and distinguished by different coloured inks, and by actual performance decide which was the best.

With his *libretti* he was never satisfied, and the authors were caused endless trouble by his sending them back again and again to have them modified in accordance with his constantly-changing notions. Scribe, after many a dispute, got so tired of him that he withdrew altogether a book he had written. The two, however, made up their difference, and Meyerbeer subsequently took from Scribe the libretto of "Le Prophète," the music to which, by the way, was composed with what for Meyerbeer was remarkable rapidity—within a year it is said—the subject having strongly attracted him.

Schubert had the pen of a ready writer. His music was composed at high speed, most of it literally on the spur of the moment, and committed to paper as fast as the notes could be written down.

In writing his Songs he had but to make himself familiar with the words, to grasp firmly the sentiment of the poet, and the poem was then poured out from his mind enriched with all the beauties of appropriate melody and harmony. "Hark, hark, the lark!" was written amidst the hubbub of a beer garden on the back of a bill of

fare. Turning over a volume of Shakespeare, he had come upon the song, and had exclaimed to a friend, "Such a lovely melody has come into my head; if I had but some music-paper!" when the bill of fare was suggested as a makeshift. Several numbers of the "*Schöne Müllerin*" were written one evening after he had carried off the poems of Wilhelm Müller from the house of a friend. The far-famed "*Wanderer*" was the work of part of another evening. The still more celebrated "*Erl King*" sprang into being with quite as marvellous rapidity. One of his friends tells of finding him, one afternoon in the winter of 1815, in a paroxysm of inspiration over Goethe's ballad, which he had just met with. A few hours later it was brought to the Imperial choristers' school and sang through, amidst the criticisms, not then altogether favourable, of his companions.

We see the spirit in which he dealt with what words he set in a remark about his "*Ave Maria*." "People," he says, "are greatly astonished at the devotion which I have thrown into it, and it seems to have seized and impressed everybody. I think that the reason of this is that I never force myself into devotion, or compose hymns or prayers unless I am really overpowered by the feeling. That alone is real true devotion."

It was seldom that Schubert made any important change on his first ideas. When the composition was once written out it was as a rule cast aside, and the composer proceeded to something new. Often it was locked away in a drawer and never thought of again. We have an instance of his forgetfulness of his own pieces told by Vogl. Vogl placed a song before Schubert. He tried it through, and said, "I say, that song's not so bad. Whose is it?" It was one of his own, and had been written only a fortnight previously.

The habits of Schubert seem to have been almost monotonous in their regularity. His rule was to compose or study for six or seven hours every morning. He was ready for work whenever he rose, and stuck to it till two o'clock, when he dined—"when there was money enough for dinner," adds Sir George Grove.

What is worth doing at all is worth doing well, was Mendelssohn's favourite motto, and in composing he carried it strictly into practice. We find evidence of the greatest care in everything he did; he seems to have had a passion for method and neatness. We see that even in the old-fashioned c-clef which he employed to the last in his scores for the treble voices, and in the unvarying long flourish with which he ornamented the double bar at the end of every piece.

His method resembled that of Mozart—that is to say, he completed the work down to the minutest details in his head before writing it out. After it was completed, however, he was never weary of alterations. He made them in the "*Hymn of Praise*," in the "*Walpurgis Night*," in "*St. Paul*," and in "*Elijah*;" he kept the Italian Symphony in ms. for fourteen years—indeed, till his death—with the intention of altering and improving the finale.

We are able to trace some of his works back to their origin, and see the germ from which they sprang. He went over Holyrood Palace, for example, in 1829, and "I think," he says, "that I found there the beginning of my Scotch Symphony." The germ of the overture to "*The Isles of Fingal*" first appears in a letter to his family, written during the same Scotch tour, and dated "*Auf einer Hebride den 7 August, 1829*." The scene of the watchman in the Hymn of Praise, to give a third example, was suggested during a sleepless night, during which he could not get the words "Will the night soon pass?" out of his thoughts.

Of Schumann at work considerations of space forbid our saying much. It was a strong point with him that he could so concentrate his thoughts that nothing proved a disturbance. His habits during the last years of his life were extremely regular. His hours for composing were in the morning till about twelve o'clock; then came a short walk; he dined at one, and, after a rest, worked till five o'clock. He then generally visited some club or restaurant. During his residence in Dresden he was a frequenter of a restaurant near the post-office, and used to be seen there sitting solitary, with his back to the company, whistling in a low tone to himself, and elaborating his musical ideas to the accompaniment of a glass of beer.

Wagner—"the master of masters," as some of his disciples delight to call him—was not a rapid worker, or a regular one either, though he used to say that he never ceased composing. He was, as we all know, his own librettist, most of the poems united to music in his operas having been written in the early part of his career. It was his habit to recite passages from these poems to himself as he walked with his Newfoundland dogs in the neighbourhood of Baireuth. He would then, to quote his own words, "seize tunes floating in the air, now like mists, now like swarms of bees buzzing on the wing, now like legions of stinging gnats," and try to make them settle on his verses "as on a mirror."

At intervals he had a fever of composition, and whilst it lasted was unapproachable. He refused to see letters or even telegrams, and his meals were sometimes passed to him through a trap in the door.

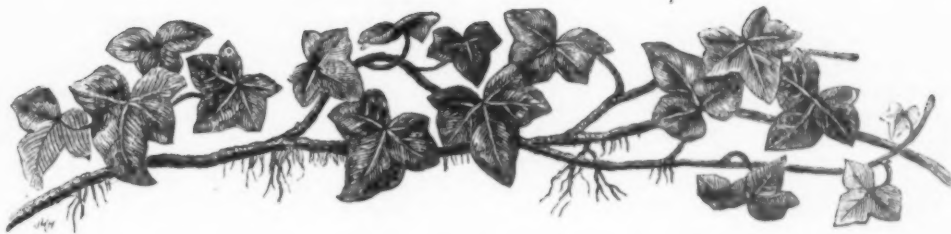
His most remarkable peculiarity perhaps was the Meistersinger costumes which he wore when at work—he had several of them, gorgeous in velvet and satin, for he varied his dress according to his mood and surroundings. In composing they seem to have been of real assistance. It is easy to turn such habits into ridicule, but "genius," remarks a well-informed writer, "often has recourse to mechanical appliances for stimulating thought, and there was nothing more laughable in the German musician's slashed doublets than there was in the monk's robe and cowl which Honoré de Balzac always sported when he sat down for a spell of hard work."

JAMES MASON.



HER MORNING VISITORS!

(After H. Werner.)



STRANGE STORIES RETOLD IN THE FIRELIGHT.

II.—THE STRANGE BUT TRUE (?) STORY OF EUGENE ARAM.

THE story of a murder is, unhappily, so commonplace, usually has so little that can be instructive in its narrative of crime, that our readers may wonder that such a tale as the one associated with the name of Eugene Aram should find a place in these pages. The real story, however, is so little known, and doubts of so impressive a character have been brought to bear upon the extent to which Aram was involved in the crime for which he suffered, that it even seems mysterious how a verdict of "guilty" should have been returned at all, and it is certain that no one could be convicted in the present day upon such evidence as condemned him. These circumstances, associated with his eminent attainments in every order and variety of scholarship, in languages, not merely the classical, but in the more remote and untrodden Celtic dialects, in astronomy and the knowledge of the heavens, especially in botany and the knowledge of herbs and flowers, must always make the story painfully interesting. Then the association of the crime with the literature of our own country. Never, while the English language lasts, will the marvellous dramatic verses of Thomas Hood cease to exercise their spell of terror; but they are the purest fancy, and might just as well receive the designation of any other startled and remorseful murderer as that of Eugene Aram. Lord Bulwer Lytton's presentation of the incident has fascinated many readers, but the theme of the story itself, as it flows from his pen, is utterly unrelated to anything in the mournful life of Aram, whose sad history would have been more truly set to the severe and painful genius of Crabbe than to his gorgeous and glowing painting.

Many years since a highly respectable lawyer, Mr. Scatterd, of Morley, near Leeds, set himself to work with enthusiastic industry to inquire into the facts of the case, with the view of rolling the obloquy from the memory of Aram. This resulted in two little books, which, although they never passed far beyond local knowledge, are yet before us as we write these pages.

The old town of Knaresborough* is one of the most interesting nooks upon our English ground. It is full of memories and legends, archæological

and antiquarian—such as its ruined old castle and its dripping well; the memory of Mother Shipton and her prophecies; and the old chapel of St. Robert, the Hermit, in the cliff. And there, we suppose, is still the ancient effigy, the presence of which has been renewed to us many times during the last thirty-five years, and which arrested many years before the genius and the verse of Wordsworth:

"The effigies of a valiant wight
I once beheld, a Templar Knight;
Both hands with rival energy
Employed in setting his sword free
From its dull sheath—sure sentinel,
Intent to guard St. Robert's cell;
As if with memory of the affray
Far distant, when, as legends say,
The monks of Fountains thronged to force
From its dear home the hermit's corse.
There where you see his image stand
Bare to the sky, with threatening brand
Which lingering Nid is proud to show
Reflected in the pool below."

All these memories give an interest to the spot. But especially strangers have been wont to wend their way by the side of the creeping, sleepy waters of the dark, tree-shadowed Nid. There, upon its gloomy banks, is St. Robert's Cave, in which the body of Clarke, with whose murder Aram was charged, was found. At that time the cave was rather a hole, unexcavated—it was the publication of Lytton's novel which led to the laying open the entire recesses of the cave. It was a strong point with Aram in his defence that the skeleton found was most probably the remains of the hermit, as a hermit was usually buried in the spot where he had passed his nights and days. The excavation led to the discovery of a grave in front of the cutting in the rock which served as an altar, but there were no remains to be found. On the day when the present writer paid his first visit to Knaresborough—now thirty-seven years since—he conversed with an old man living with his daughters at a cottage in the cliff, and whose reputed age was one hundred and four years, and who said he had been taken, when a child, by his father and held up on his father's shoulders to see Aram hanged; and the old man murmured out his recollections of the indignation of the crowd—

* "Memoirs of the Celebrated Eugene Aram," etc., etc. By Norrison Scatterd, Esq., author of "The History of Morley," and edit., 1838. "Gleanings" after Eugene Aram at Knaresborough and Lynn. By Norrison Scatterd, Esq. 1836.

not at Aram, but at his execution, and their belief that the real murderer, who ought to have been in Aram's place, was Houseman.

If it were not for his association with this crime Aram would hold a highly honoured place amongst those illustrious names which commemorate the pursuit of knowledge under difficulties. Indeed he finds a place in Mr. Craik's interesting volume bearing that title. His passion for learning was insatiable; the courage with which he surmounted what seem now to us insuperable difficulties was amazing; and those best able to judge have expressed their belief that had his life been spared and had circumstances been propitious, he would have added materially to the stores of ethnological learning—especially by a dictionary which he proposed, in which, with a prescience beyond his age, he meditated the cognate relations of the Celtic with the Hebrew, and these, again, with the Greek, Latin, and English languages.

Eugene Aram was born in 1704, in Netherdale, in Yorkshire—he was the son of Mr. Peter Aram, as the registry of his baptism sets forth—the 2nd of October of that year, and in that neighbourhood, at Ramsgill, he followed the profession of a schoolmaster, and appears to have stood high in the estimation, not merely of the farmers, but of the gentlemen of the neighbourhood. He was the instructor of the sons of some of the best families, and notably the first instructor of Dr. Craven, who became Principal of St. John's College, Cambridge, and Professor of Arabic in that University. Those who in the relation of pupils had known Aram appear to have retained through life a high affection and respect for him, and it is certainly noteworthy that after his execution two Oxford scholars appeared in Knaresborough. Their visit was to find out Houseman. They broke into his house, smashed its windows, destroyed its furniture, and, but that he beat a precipitate retreat, would probably have destroyed him. Houseman went to a respectable bookseller, named Simpson, in the town, from whom the Oxford men seemed to have received all their information, to ask him what he should do in the way of obtaining redress, and Mr. Simpson recommended him to submit to the affront, or that probably, as the town was aroused against him, worse would come of it. This led to his leaving Knaresborough and removing to Marton. He was scarcely ever seen abroad, and never without being welcomed by hissings, hootings, and every manifestation of public indignation.

The romance of love which has been thrown round Aram's history is an illusion. He married at the age of twenty-seven, in Netherdale. All that transpires about his wife places her in a bad light. Beyond any doubt she was a very evil woman, and was probably the cause of his leaving the neighbourhood, where he seems to have been respected, and where, after Mr. Scatcherd's searching inquisitions, no shadow seems to gather round his memory. So he came to Ripon, and after a short time removed to Knaresborough. He was probably not in indigent circumstances, for his name appears among the subscribers to Gent's "History of Ripon." His father, Peter Aram,

was a gardener, and is described as the author of a poem on Studley Park. Hence began Aram's acquaintance with flowers—a study, however, which he followed far beyond the labours of the arboriculturist. Indeed, flowers appear to have been his especial passion, and he acquainted himself with the systems of the most illustrious naturalists, among whom he mentions Turnefort, Ray, Miller, Linnæus, etc., etc.

When in London he was a frequent visitor at the Botanic Gardens, Chelsea, and was on terms of friendship with the Rev. Mr. Hinton, the Principal there, who used to relate how, in their walks through the gardens, Aram would stoop to pick up a worm from the path and throw it aside to save its life, which the good clergyman supposed was the way he took to atone for the murder he had committed by showing affection and kindness to every animal. Gentleness, however, seems to have been the law of Aram's life, and his pupils testify for him that in the school-room he was no Busby in severity, but rather an Aylmer in gentleness.

In Knaresborough, however, the tragedy of his life was wrought out, and the mystery is inscrutable. Settling in Knaresborough, he very singularly appears to have formed an acquaintance with a circle of men of the lowest character; and this episode in his life is remarkable, as he does not seem to have formed similar acquaintances elsewhere, or at any other period of his life. Mr. Scatcherd attributes this to his wife, whom he describes, from all testimony, as "a low, mean, vulgar woman of exceedingly doubtful character, who made Aram perpetually miserable, and drew him into acquaintance with her disreputable associates. To such a woman the company of people like Clarke the shoemaker, Houseman the flax-dresser, Terry the alehouse-keeper, Levi the Jew, and Iles the pawnbroker would be natural companions." Here, as we look back, appears to be the clue to his fate. With Clarke, indeed, Aram seems at first to have been more friendly, as he also had some skill as a florist and botanist; unhappily, with this, also, there appears to have been a preference for Aram's wife. Clarke was, upon all evidence, a man capable of any amount of low knavery; he appears, by some fraud, to have possessed himself of a considerable amount of plate and other property, and it is "presumed"—this is the very word employed in the account of the trial now before us, dated 1759—it is "presumed" that Aram must have been aware of this, and was to share the booty. For this purpose the three—Houseman, Aram, and Clarke—were on their way to St. Robert's Cave; the testimony of Houseman afterwards was that Aram and Clarke were together six or eight yards from the cave, when he heard them quarrelling; he saw Aram strike Clarke several times, upon which Clarke fell, and never rose again.

It was shortly after this, when Clarke was missing, that Aram also left Knaresborough, and both departures were lost in obscurity. As it was known that Clarke had become possessed of some little property besides that which he had obtained by some unfair means, it was not unnatural to

suppose that he had met his death by some foul play; but it does not appear that suspicion alighted upon Aram, rather, it is to be thought, upon Houseman, although Aram's departure was undoubtedly mysterious and suspicious. After some wanderings, and residence in London, Aram, as our readers know, found his way to Lynn, in Norfolk. He would not appear to have been especially careful to conceal himself, for during his visits to London he constantly frequented some well-known places, and held intercourse with some well-known persons. His chief object seems to have been to get away from his bad wife. He became teacher in a school in Lynn—and a highly respectable school. Here he was the tutor of Charles Burhey, afterwards Admiral Burhey, the great friend of Captain Cook, and the father of the well-known Dr. Burhey. Here he appears to have formed the acquaintance of the clergymen and gentlemen of the neighbourhood, by whom his company was desired and prized.

Of course, of such a man, after his conviction innumerable inventions and stories would be repeated as if he were an adept in crime, although it is by no means certain that he received any of the property that was missing with Clarke. Mr. Scatcherd has hunted up all the traditions in Lynn, has dissolved all the evil stories in searching evidence, and only discovers that he was remarkable for his gentleness, but also for a decided air of reserve, silence, and mystery, which attributes are quite natural enough in connection with the character of a recluse and scholar.

Fourteen years passed by when he was recognised while on a visit at the house of the Rev. Dr. Weatherhead, at Lynn, by a person from the neighbourhood of Knaresborough. By a curious converging of incidents also, the circumstance happened which Bulwer has wrought with such dramatic effect in his fiction, while scarcely going beyond the most literal circumstances of the narrative. A skeleton was found near a lime-kiln at Thistle Hill, near Knaresborough; a crowd gathered on the spot, and, amongst others, Houseman, said to have been drunk at the time. Several of the crowd said, "This is Clarke's skeleton, who was missed fourteen years since." Houseman took up one of the bones, exclaiming, with immense imprudence, for which only his condition could account, "This is no more Clarke's skeleton than it's mine. Clarke was never buried here!" "Then, where was he buried?" exclaimed one of the bystanders, laying forcible hands upon. "In St. Robert's Cave," said the villain, by this time probably somewhat sobered to a sense of the insanity of his exclamation. The crowd hurried away to St. Robert's Cave, and there, indeed, they discovered the remains, and, naturally enough, denounced Houseman—probably suspected before—as the murderer. He, in turn, to exculpate himself, charged the crime on Eugene Aram, and the clue to his residence having been furnished from the person who had seen him at Lynn, he was arrested, and set out from Lynn "with gyves upon his wrist."

He does not appear to have supposed it possible that he could be convicted, and Mr. Scatcherd, in his interesting "Gleanings," truly says, "The greatest mystery now is that a man of the most wonderful abilities and attainments, of the most profound erudition, of most remarkable usefulness and fame as the instructor of youth—a man highly esteemed at Knaresborough and Lynn, and whose character, company, habits, and pursuits, were '*unexceptionable*;' a man, in short, of great value to the community, should be selected as the object of public punishment and ignominy; while a low and infamous villain, at least equally guilty of blood and robbery, and execrated in his neighbourhood, was favoured and protected."

Judging from the facts as they lie before us, he appears to have suffered exceeding injustice. He was permitted to languish in gaol twelve months before his trial, and suffered exceeding deprivation, so much that he wrote to the Vicar of Knaresborough asking him for some help to make life, even in prison, more endurable. The clergyman appears immediately to have sent him five pounds. The only witness against him was Houseman, who was sustained by Aram's own wife. Four counsel were engaged to plead against him; for himself he had no counsel—had no means of employing any. His own speech in court, long and elaborate, has been said to be weak in that it altogether evades the discussion of the question of the crime, and only deals with the improbability arising from the place in which the skeleton was found, and the frequent sad mistakes of mere circumstantial evidence. As an oration it deserves a place among the most masterly in the language for elegance, eloquence, and learning. From this address we may extract one beautiful passage:—

"First, my lord, the whole tenour of my conduct in life contradicts every particular of this indictment. Yet I had never said this did not my present circumstances extort it from me and seem to make it necessary. Permit me here, my lord, to call upon *Malignity* itself, so long and cruelly busied in this prosecution, to charge upon me any immorality of which *Prejudice* was not the author. No, my lord, I concerted not schemes of fraud, projected no violence, injured no man's person or property. My days were honestly laborious, my nights intensely studious; and I humbly conceive my notice of this, especially at this time, will not be thought impertinent or unreasonable, but at least deserving some attention. Because, my lord, that any person, after a temperate use of life, a series of thinking and acting regularly, and without one single deviation from sobriety, should plunge into the very depth of profligacy, precipitately and at once, is altogether improbable and unprecedented, and inconsistent with the course of things. Mankind are never corrupted at once; villainy is always progressive, and declines from right, step after step, till every regard of probity is lost, and every sense of moral obligation totally perishes."

If Aram were indeed guilty his defence is still one of the most remarkable pieces of special pleading; it is ingenious, but its weakness has

usually been thought to lie in its entire absence of all allusions to his knowledge of Clarke, to his wife, who had also witnessed against him, and to the associations by which he was surrounded in Knaresborough. Certainly, we suppose, no jury in our day would have convicted, no judge would have condemned him upon the evidence. Some of the instances he cited ought to have made any jury tremble before convicting, any judge hesitate in sentencing. He especially referred to the case of the two Perrys and their mother, who were really found guilty, sentenced to death, and executed for the murder of a person, one Harrison, who reappeared years after in the neighbourhood in Gloucestershire, from whence he had been kidnapped and carried abroad, and with whose disappearance the victims had no connection. We have ourselves looked up the story in "Howell's State Trials," from whence it was quoted by Aram, and it is so strange that we may possibly find space to recite it in some future pages. But he was as unfortunate in his judge as in most of the circumstances of his troubled career. Horace Walpole refers to him, Justice Noel, as "a pompous man of little solidity," and there are those who believe—and the circumstances as we have narrated them seem to justify the belief—that Aram was a victim to the prejudices of his neighbourhood and his age, to which it seemed astonishing and audacious that a poor man—the son of a poor country gardener, and in most obscure circumstances—should be regarded by all who knew him as one of the most elegant and accomplished scholars of his time. Only three days elapsed between his condemnation and his execution. It is said that in the interim he attempted to commit suicide. This is not so certain; but what is certain is that, in reply to a clergyman, he wrote a brief account of his life, and the process of self-education he followed, and it is a piece of remarkable interest. The probability that he attempted suicide arises from the paper found in his cell, on which was written, "What am I better than my fathers? To die is natural and necessary. Perfectly sensible of this, I fear no more to die than I did to be born; but the manner of it is, in my opinion, something that should be decent and manly. I think I have regarded both these points. Certainly nobody has a better right to dispose of man's life than himself, and he, not others, should determine how. As for any indignities offered to my body, or silly reflections on my faith and morals, they are, as they always were, things indifferent to me." He then commends himself to God, and closes, "Though I am now stained by malevolence, and suffer by prejudice, I hope to rise fair and unblemished. My life was not polluted, my morals irreproachable, and my opinions orthodox." His last words were the following lines:—

"Come, pleasing rest! eternal slumber fall,
Seal mine, that once must seal the eyes of all!
Calm and composed, my soul her journey takes,
No guilt that troubles, and no heart that aches!
Adieu! Thou sun, all bright like her arise.
Adieu, fair friends, and all that's good and wise!"

He was hanged in chains in Knaresborough Forest. Something of the estimate in which Houseman was held we have already seen. He appears to have lived so miserable a life that certainly twice his daughter-in-law cut him down from an apple-tree in his garden in his attempt at suicide. He was always prowling along the banks of the river and washing his hands in its waters. If he lived, and it appears he did, in great alarm before Aram's arrest and execution, his alarms and terrors did not diminish afterwards. He was in danger from his neighbours, by whom he was hated and mistrusted. He is described as a dark, ill-looking fellow, with a brown wig, and people used to say of him that he was the real picture of a murderer. He had hard times of it. In the streets he was called "Scape Gallows." More than once his life was with difficulty preserved from the mob, who sometimes became furious in their wrath against him; and an old number of the "Gentleman's Magazine" records how he was carried about the streets of Knaresborough in effigy, then knocked on the head with a pickaxe, which it came to be believed was the manner in which he had murdered Clarke, then hanged upon a gallows, and burned. Popular expressions such as these do not always go for much, but in this instance they not only distinctly testify as to the popular sentiment concerning Houseman, but reflectively also express the same sentiment as to the innocence of Aram. If the stream of this story be correct—as we have every reason to believe it is—our readers, perhaps with ourselves, will probably believe that Aram received but a scant measure of justice in his trial and conviction, and that a like injustice has followed his memory. It is more than possible without any exaggeration of sentiment to doubt whether he was an accomplice in the murder at all.

E. P. H.

A Valentine.

O SWEETEST mine! O sweetest mine!
I send you a prayer in a valentine.

When at morn you do arise
May th' unclosing of your eyes
Ope such blue uncloudie skies
As those above you—Fair and Wise!

When at noon you do fulfil
Homely task with hearty will,
May your kindness, like the sun,
Straitly fall on everie one!

When at eventide you rest,
Changeful, peaceful, as the West,
May your gentle mood reflect
Nature's sweetly tired aspect.

And when Holy Night is here,
May you, pure and lowly, dear,
Like her, e'en in sleep express
Trust and love and holiness!

D. C. ANGUS.

CLIFF CASTLES.

IT could not always be sung or said,

"Britannia needs no bulwark,
No tower along the steep,"

for the disused Martello towers along the south coast, the small defensive block-houses which preceded them, the harbour-castles of earlier times, the grand feudal fortresses of Bamborough, Scarborough, Harlech, Hastings, and Dover, bear witness to the contrary. But there is a remarkable group of defensive works of earlier date than these, which we have designated as "Cliff Castles," and which are found principally on the south-western coasts of England and Wales. These now exist only to whet the curiosity of the antiquary and to add to the picturesque character of the beetling and crumbling cliffs.

In regard to the original design of these structures, too, we must regard it as a fearful illustration of man's degeneracy to find that the earliest traces which we possess of his works in these parts reveal the existence of mutual personal wrong and violence, robbery and murder. They indicate an age in which personal physical force, exerted by one man or tribe against another, was the leading characteristic. Such is the lesson also taught by the few remains discovered in the relics of the most ancient British huts. The arrow-head in the broken skull of many a skeleton from the old barrows tells the same tale, which is also indicated by the fact that the most considerable remains known to us of the period referred to are the defences of war. We search in vain in the records of the remote past for the golden age of the poets, or for pictures of primeval innocence.

The traveller along the picturesque coast of the whole western portion of England, specially in South Wales and Cornwall, cannot fail to observe these cliff castles which dot the edge of the rugged cliffs towards the Atlantic.

They are all constructed on one plan. They invariably occupy projecting headlands of the cliff, a portion of the latter being cut off by a fortification consisting of two or three banks with corresponding ditches, the banks extend across the neck of the promontory, and one bank is usually continued along the face of the cliff at the sides, until the latter becomes so precipitous towards the sea as to render it unnecessary. The banks are in some few instances faced with stones built up without mortar. The entrance, which is a mere break in the bank, is usually protected by an additional mound. In many of them there may be traced round spaces, some with slight ridges and having made-earth within the ring, similar to the well-known hut-circles. These circles probably constituted the lower portion of a beehive structure for habitation usually formed of wattle-and-daub. There are numerous inequalities of surface in and

about the areas, betokening that the hands of men had been at work there. Of course the nature of the soil, and the presence or absence of stone, makes one work different from another, and there are differences in the height and depth of the banks and ditches corresponding to the importance attached to the site and the time and strength of the workers. Sometimes a subsidiary headland, branching from the main one at the neck, is fortified by a separate work. None of these inclose any pathway down to the sea, they are placed usually far from any such access. Neither was the absence of fresh water treated as any disqualification for such localities.

There are no less than thirty of these castles on the frowning cliffs of Pembrokeshire between Tenby and Fishguard, namely at Old Castle Head, near Manorbier, Greenhale Point, Boshes-ton, Flimston (two), Linneyhead, Pickard, Stud-dock, Milford Ferry, Milford, Little Wick, Little Castle, Great Castle, Dale, Masloes, Anvil Point, Torre Point, St. Brides, Broadmoor, Musclevick, Haroldston, Solva, Caerbwddy, Porth Stinian, St. David's Head, Carnedd-owion, Aberpwl, Castell-coch, Castell, Fishguard, besides the great entrenchments at Dinas Head, and the fragments of other works lost by the wear of the cliffs.

A brief notice of the present condition of a few of these will suffice for all.

Near West Angle Bay there is a well-marked defence, cutting off a barren promontory as usual, with very numerous surface markings of dwellings or folds. These works are so constructed and situated that two or three men might successfully defy a whole army of invaders armed only with javelins, for only a number equal to the defenders at the breach could scramble up at a time.

Near the wonderfully jagged coast at the Stack Rocks there are two castles showing the usual construction, and one of them is dotted with the sites of cots.

Hard by, at the warren, are the remains of an important British village of late Celtic times, where a gold fibula (now in the British Museum), barrows, and relics of the bronze age have been discovered.

There is a fine earthwork between Porthyrav and Solva. It is very strong, with outer and inner banks, continued as usual round the weak part of the precipice on either side. There are here also traces of folds or huts. It is somewhat remarkable that these fenced promontories are difficult to detect, or even to see from any distance, as the cliffs usually descend slightly from the high table-land of the coast, and the outlines of the mounds are concealed by intervening downs or melt into lines similar to the contour of the downs themselves. From the sea they would also be distinguished with difficulty, and the long lines of surf on the iron-bound shore forbid landing under their shadow

Castell Henoff, about a quarter of a mile south of Porth Stinian, is a considerable work. Another is found at Porth Trewin, now broken into by a slate quarry, and again a far larger one at Pwllcaerog, well defended, and showing numerous marks of hut-circles, and a still larger one at Langharne, in Abercastell Bay, about a mile off.

The fortification at Pen Dewy (St. David's Head) is an important work of this class. There is an inner defence formed of surface-stones about twelve feet wide at the base and half of that in height; and then a hollow ditch, where the earth has been taken from the mound, and a high mound in a semicircular form corresponding to the neck of the promontory, and steepest on the outer side, covered with surface-stones, and forming really a formidable defence. The steep slope of the approach is strengthened here and there by additional ramparts. The area commands the sight of all the approaches. There are traces of regular courses of building stone facing the great bank. The name given to this work is "Clawddy-Millwyn" (the Warrior's Dyke). On the grassy spots within the area are apparent some remains of hut-dwellings or cattle-folds. It may be noted that most of these defences are on land which must always have been devoted to rough pasture, and consequently has been free from the plough-share, and in situations where the adventurous modern builder has never appeared.

The cliff castles near Cape Cornwall at the Land's End are well marked, and precisely like those of Wales. They have usually three ditches and three banks, and these are skilfully combined in each instance with the natural rock features of the promontory. There are remains of a hut-circle in the Castle of Kenidjack. The most elaborate and considerable of these structures is Castle Trewyn, within which is the Logan Rock. One fine example occurs on the Island of St. Mary, Scilly, and is called the Giant's Castle.

Notwithstanding the wear and tear of the restless Atlantic, and all the violent influences of wind and weather, these works do not appear to have suffered very much diminution. Frequently the stones have been carried away for use, and the earth also, but on the whole they are remarkably well preserved.

A very slight acquaintance with them seems to show that they were not defences against invasion from the sea, but from the land. They are not connected with the landing-places, nor is there any way from them down to the beach in the great majority of instances. It is equally apparent that they were not towns or villages, or places of permanent abode. The situation of these barren promontories without water, with scanty food for sheep, torn by the winds, without shelter, or wood for fuel, precludes the idea of their having been anything save a temporary resort from the tempest of war, or a place for flocks and stores to be kept safe from the foe. The policy of the Celts when attacked, as they often were at one point by overwhelming numbers, was a policy of retreat to mountain fastnesses, or to these prepared resorts amongst the distant cliffs.

The common notion that these were fortifications thrown up by the Danish invaders on their predatory visits to our shores must be given up, although it has almost the strength of a tradition. No boat could land at the foot of these precipices, and if it did no mortal could climb the rocks, and if this were possible he could get nothing for his pains on the barren country above.

The difficulty of fixing the chronology of these works is enormous. From their style we may conclude that they were contemporaneous with the old camps which we call British, and which were probably pre-Roman as well as post-Roman. We may also consider them as contemporaneous with the oldest barrows and burial-places. Were they also contemporaneous with the monuments of Avebury, Stonehenge, and the numerous pillars, circles, and avenues, and with the sepulchral caves of Brittany and Cornwall, and the cromlechs? It may be argued that all these structures belong to one people, the Celts, that they were continued in use during and after the Roman invasion down or into the age of bronze, and even to that of iron. They cover at least a period of five hundred years, and belong to a definite epoch which begun with the irruption of the Celtic people who overcame the Iberian or Silurian race which had succeeded to the cave-dwellers and the river-drift men, and lasted down to the Roman occupation, and probably through this, and afterwards until the Anglo-Saxon conquest.

Tacitus says: "Whether the first inhabitants of Britain were natives of the island or adventurous settlers is a question lost in the mists of antiquity." The Britons, like other barbarous natives, have no monuments of their history, and we learn from Cæsar that the government was partly popular, under chiefs or kings, of which there were four in Kent alone. These earthworks show the prevalence of tribal wars and also the existence of communities, for without government and order such extensive and numerous works could not have been raised.

Brotier says of the ancient German tribes that in general pointed stones were prepared by them for weapons.

But we doubt whether our subject can be carried so far back in the stone age as to touch the Palæozoic, or drift period, and we unhesitatingly assign to them an age beginning with polished stone tools and poor pottery, and passing down to the ages of bronze and iron. Just as the Celts who mastered the aborigines of Britain became amalgamated with them so that all distinction was lost, so the Neolithic age runs down into that of metal, and the two subsist for a long time together, so that chronology is lost in the one case and ethnology is lost in the other.

The Celtic age clearly ranges from the stone age down to and inclusive of the early iron age. The *débris* found in the pits at Worle Hill, near Weston-super-Mare and elsewhere, display small stores of wheat and barley, bones of swine, of short-horned cattle, and lumps of ochre.

The description given by Tacitus affords a key to the few pre-Roman remains which we still possess. He says: "The Germans, it is well

known here, have no regular cities, nor do they allow a continuity of houses. They dwell in separate habitations, dispersed up and down, as a grove, a meadow, or a fountain happens to invite. They have villages, but not in our fashion, with a series of connected buildings. Every tenement stands detached, with a vacant piece of ground around it, either to prevent accidents by fire, or for want of skill in the art of building. They neither know the use of mortar or of tiles. They build with rude materials, regardless of beauty, order, and proportion. . . . Besides these habitations, they have a number of subterranean caves, dug by their own labour, and carefully covered over with litter, in winter their retreat from cold or the repository of their corn. In those recesses they not only find a shelter from the rigour of the season, but in times of foreign invasion their effects are safely concealed. The enemy lays waste the open country, but the hidden treasure escapes the general ravage, safe in its obscurity, or because the search would be attended with too much trouble.*

Mr. Ferguson ("Ancient Stone Monuments") claims Stonehenge as Arthurian and post-Roman, thus introducing a break in the succession of the stone age and bringing it down to a comparatively recent date. But this conclusion of the learned archæologist is not admitted. Soon after the Norman conquest the Celts ceased to have any nationality in England, and in Wales they formed a discontented portion of the old community driven into Wales and Cornwall. They retained their language in the former, but had accepted Christianity, and fortunately had lost those internal tribal distinctions which kept their forefathers in a perpetual state of turmoil, wars, and robberies. Indeed for some centuries before the Norman conquest they had been thus driven westward by the Saxons, as they had before this also been pressed by the Roman invaders. It is during the former part of their rule, during the prevalence of their own petty wars, and afterwards whilst they were subject to the raids of other hostile nationalities, that they were accustomed to fly

before the invader, take refuge in the barren cliff retreats, bury their scanty supplies, and return to their inland fields and pastures and villages as soon as the invader had retreated, owing to the exhaustion of all supplies. No authentic records exist of these centuries of suffering. The only memorials are the crumbling mound swept by the Atlantic breezes bearing its silent testimony in perfect solitude for the last thousand years. In the inner country we have more regular castles and camps, and the barrows and burial chambers, the cromlechs and the graves, with their grim contents—"All times are thine own, O death!"—but the footprints around the coast of Cornwall and Devon enable us to restore just so much of their living history as to excite the hope that such times and scenes may never return.

A glance at the one-inch ordnance survey map of our western coast serves to show the number in which these refuges existed, and therefore to prove the comparative populousness of the inland country at that time, but it is true, as Dr. Anderson says,* "there is no class of ancient remains of which we know less."

The curious works called dene-holes (dens) in Kent and Essex, near Bexley in the one county, and near Grays and East Tilbury in the other, and analogous constructions elsewhere, have considerable relation with the cliff castles, for both in all probability were used as granaries and storehouses and places where the scanty personal effects of the ancient Britons were hidden for safety, after the manner of the Germans noticed by Tacitus. Like the cliff castles, no written record exists respecting them. In all probability they belong to the same period as the intrenchments along the western coasts. No remains have been found hitherto on the floors of these caves attributable to the excavators, or to the people who used them, but broken pottery and flints are contained in the *débris* as well as the side markings made by the agonised furious scratchings of wretched animals hopelessly incarcerated as in a pitfall until death overtook them in hunger and darkness.

S. R. P.

* Murphy's "Tacitus," vol. vii. p. 27.

* Anderson, p. 271.

ISLAM AND CHRISTIANITY.*

THERE can be no question but that, with its pure monotheism, and a code founded in the main on justice and humanity, Islam raises to a higher level races sunk in idolatry and fetichism, like those of Central Africa, and that in some respects—notably in that of temperance—it materially improves the morality of such peoples. But, having raised them to a certain point, it leaves them there. Whether in things

secular or spiritual, there is no advance. The defects of which I have been treating cling to the outer life; and as regards the inner life, there is, in the cold and formal round of Moslem ordinance, altogether wanting the genial and motive power of the Heavenly Father's love.

When, again, we come to compare Islam with Christianity, and first in its secular aspect, one is immediately struck with the difference between the two in the virtue of adaptation to the wants and aspirations of humanity. Islam imposes a code, hard, fast, and imperative in every detail,

* "Mahomet and Islam." By Sir William Muir, K.C.S.I. The Religious Tract Society.

which, however well it may have suited Arabia thirteen centuries ago, is quite unfitted for the varying requirements of other times and places. Yet it binds society hand and foot; there can be no onward, upward movement, nor even the attempt to rise.

The Christian code is altogether different. It lays down principles, and not details. If there be one exception—that, namely, in respect of marriage and divorce—it is expressly based on the laws of nature. “He,” said Jesus, “which made them at the beginning, made them male and female . . . what, therefore, God hath joined together, let not man put asunder.” The foundations of Christian morality are not less immutable than those of the Coran, but they are infinitely broader, and can be built on for all generations. Its laws are capable of being applied to the habits, thought, and institutions of all ages, and its doctrines harmonise with every upward step towards freedom, knowledge, and philanthropy; indeed, we may say, themselves contain the plastic force which brings these results about. In short, the distinction between the two creeds is, that while the aspirations of humanity have free play under the Gospel, in the swathing bands of the Coran they are altogether checked and stifled.

There is perhaps no greater contrast in the precepts of the two religions than that relating to the sword. As an instrument for the propagation of the faith (however practice may often have widely differed from precept), the use of the sword is abjured by the Gospel,* while it is commanded by the Coran. Before the Flight, Mahomet was profuse in his declarations that there should be “no constraint in religion.” But so soon as he came to power he drew the sword, never, as the reader knows, again to sheathe it; and his followers have not been slow to tread in his steps. “My kingdom,” said Jesus Christ to the Roman governor, “is not of this world: if My kingdom were of this world, then would My servants fight, that I should not be delivered to the Jews: but now is My kingdom not from hence.”†

Turning to the spiritual aspect of the two faiths, a wide difference exists between the ordinances of Islam, rigidly tied down as they are to time, and in one respect to place, and those of the Gospel, which can be suited to the changing circumstances of the moment, and the varying demands of clime and season. The obligation to pray in stereotyped form at so many stated hours of the day is prone to degenerate into a lifeless worship, though I am far from asserting that it is always so. Much the same may be said of fasting and pilgrimage, the latter being an ordinance practically unattainable by multitudes, and the former, according to the stringent rule of the Coran, altogether impracticable in some zones of

the earth.‡ The contrast with the spirit and precept of the Gospel, and the simplicity of its two positive ordinances, is too patent to need dwelling on.

Again, while the Coran represents God as Creator, Ruler, and Preserver, the Rewarder of good and evil, and the Hearer of prayer, it nowhere recognises Him as a Father, much less the Father of our Lord Jesus Christ. The sentiment of the Moslem partakes, therefore, of the fear of a servant more than the love of a son. The office of the Holy Spirit as Regenerator is unknown, and the death and resurrection of Christ are denied. There is thus in Islam nothing answering to the grace of redemption, and consequently the grand power of the Gospel—namely, the love of Christ as a constraining influence—is wanting; nor is there the approach to anything that might supply its place.

To put the matter shortly, each religion is an embodiment of its founder. Mahomet sought power; he fought against those who denied his claims; he put a whole tribe to the sword; he filled his harem with women, bond and free; he cast aside, when they had served his purpose, the Jewish and Christian Scriptures, and he engrafted his faith on the local superstition of his birth-place. He did all these things under cover of an alleged Divine authority, but he did no miracle.

The life of Jesus is all in contrast. He spoke and taught as one having the inherent authority in Himself; but He could also say, “The works that I do in My Father’s name, they bear witness of Me.” He was holy, harmless, undefiled. He pleased not Himself. Though rich, he became poor, that we through His poverty might become rich. He made Himself of no reputation, and took upon Him the form of a servant. He was despised and rejected of men. He humbled Himself, and became obedient unto death, even the death of the cross.

Is there any common point whatever in the two lives? “He that is of the earth is earthy, and speaketh of the earth; He that cometh from heaven is above all.”

Where in the Coran are to be found words like these, descriptive at once of the new life and of the Giver Himself? “I am the Resurrection, and the Life: he that believeth in Me, though he were dead, yet shall he live: and whosoever liveth and believeth in Me shall never die.”

And again, “I am the Good Shepherd: the Good Shepherd giveth His life for the sheep.”

And yet again, “Come unto Me, all ye that labour and are heavy laden, and I will give you rest. Take My yoke upon you, and learn of Me; for I am meek and lowly in heart: and ye shall find rest unto your souls. For My yoke is easy, and My burden is light.”

* Matt. xxvi. 52; John xviii. 36.

‡ As where all is day or all is night, or nearly so, in the month of Ramadhan.



Thos. Paine

BORN APRIL 28, 1801.

(Reduced from a large engraving in "The Cottager and Artisan.")

HINTS FOR THE IMPROVEMENT OF THE DWELLINGS OF ARTISANS AND LABOURERS.

FOR a long period most persons who have thought seriously of the important subject of how permanently to improve the physical, moral, and social condition of the labouring population of this country, have come to the conclusion that one of the first steps to be taken in bringing about so desirable a state of things, is to improve the dwellings of the labourers. In London and other large cities and towns something has been done towards remedying the evils that exist by erecting model lodging-houses, and these have proved an invaluable boon to all who are enjoying the comforts which they afford, and have tended greatly to improve the health of the dwellers in the districts in which they are placed. What has been done, however, in this respect, is small indeed compared with what is absolutely needed to meet the entire necessities of the case, and it is much to be hoped that those who have the power and the will to assist in carrying on so good and so important a work will aid to the utmost extent all well-devised schemes.

In country villages and on the estates of our large landed proprietors* some attention has also been given of late years to the state of the cottages of the working classes, and many have been either rebuilt entirely or remodelled and made far more conducive to health and morality. Notwithstanding, however, what has been already done in the matter, much, very much, remains to be accomplished, and as it is of the very first importance that whatever is attempted should be in conformity with a well-considered plan likely to attain the desired object, it will, it is believed, prove useful to proprietors and others to state briefly the essential requisites for comfortable and convenient labourers' cottages in the country.

1. The cottages should be placed near a public road, as being more cheerful than a solitary situation. The main object in building a cottage being to produce a comfortable dwelling, a dry, airy situation should be chosen, and, if possible, the ground should fall gently from the cottage on one side. If possible the aspect should be one that will allow the sun to shine on every side of the cottage a portion of every day in the year when it is visible.

2. Every cottage ought to have the floor elevated that it may be dry; the walls double or hollow, or battened, or not less than eighteen inches thick, that they may retain heat, with a course of slate, or flagstone, or tiles bedded in cement, six inches above the surface, to prevent the rising of damp, or a floor of thick blocks of wood laid on concrete; the roof thick or double, for the sake of

warmth, and projecting eighteen inches or two feet at the eaves, in order to keep the walls dry, and to check the radiation of heat from their exterior surface. The advantages of thick walls, and of thick or double roofs of high pitch, and projecting at the eaves, with reference to retaining heat, are greater than can well be conceived by those who have not dwelt in a cottage. A high and dry floor is essential, whether this be secured by placing the cottage on a terrace, or by raising the floor inside, and ascending to it by outside steps.

3. In general every cottage ought to have upstairs rooms, so that the sleeping apartments may not be on the ground floor, and the ground floor ought not to be less than from six inches to one foot above the outer surface.

4. The minimum of accommodation ought to be a kitchen or living-room, a back kitchen or wash house, and a pantry on the ground floor, with three bedrooms over; or two rooms and a wash-house on the ground floor, and two bedrooms over.

5. Every cottage, including its garden, yard, etc., ought to occupy not less than one-sixth of an acre, and the garden ought, if possible, to surround the cottage, or at all events to extend both before and behind. At any rate there ought in general to be a front garden and a back yard, the latter being entered from the back kitchen, and containing all the requisite conveniences. Cottage allotments, by which are to be understood portions of ground in a field allotted to cottages at some distance, are much better than no gardens at all; but they are far from producing the comfort and enjoyment of a garden in close contact with the cottage to which it belongs.

6. If practicable, every cottage ought to stand singly and surrounded by its garden, or at all events not more than two cottages ought to be placed together. Among other important arguments in favour of this arrangement it may be mentioned that it is the only one by which the sun can shine every day on every side of the cottage. When cottages are joined together in a row, unless that row is in a diagonal direction with reference to a south and north line, the sun will shine chiefly on one side. By having cottages singly or in pairs they may always be placed along any road in such a manner that the sun may shine on every side of them, provided the point be given up of having the front parallel to the road, a point which ought not for a moment to be put in competition with the advantages of an equal diffusion of sunshine.

7. Every cottage ought to have an entrance porch for containing the labourer's tools, and into which, if possible, the stairs ought to open, in order that the bedrooms may be communicated with without passing through the front or back

* On the estates of a great many of our nobility and gentry it is most gratifying to see the admirable, nay perfect, cottages which have been built, notably at Edensan, in Derbyshire, by the Duke of Devonshire, and at Cambo, in Northumberland, and Nettlecombe, in Somersetshire, by the late Sir Walter Calverley, and at Bovey, in Devonshire, by the late Sir Walter Calverley.

kitchen. This, in the case of sickness, is very desirable.

8. The door to the front kitchen, or best room, should open from the porch, and not from the back kitchen.

9. When there is not a supply of pure water from a spring adjoining the cottage, or from some other efficient source, then there ought to be a well, and there should also be a tank, partly under the floor of the back kitchen, supplied from the roof, with a pump in the back kitchen for drawing it up for use. The advantages of having a tank under the back kitchen are, that it will be secure from

frost, and that the labour of carrying water will be avoided. A constant supply of pure water is of the greatest importance, and ought at all times to receive the most careful consideration when fixing on sites for cottages.

Most of the conditions now stated are laid down on the supposition that in building cottages for the labourers, the proprietors are actuated more by feelings of human sympathy than by a desire to make money. Hence these remarks are addressed not to speculating builders but to the wealthy, and especially to proprietors of land and extensive manufactories, and mines.

D. W.

Varieties.

Napoleon the First.

As everything relating to "great men" is of interest, I think it likely that the following letter in which Napoleon Bonaparte is the chief figure is worth perusal. It has been sent to me by a lady for some years a resident in Jamaica. The extract from her letter will show how it came into her hands, and also gives a charming little vignette from the scenery of that lovely and luckless island. She writes: "We have been paying a visit to our old friend F. W.—. The place he lives at is charming, with one of the most exquisite tropical sea views you can imagine—very different, that is, from the rolling breakers, grey uneasy waters, wild winds, stern cliffs or yellow sands of our English coasts, especially in the tumult of their winter time. Here, though it is January, the placid blue water is bounded and broken by green islets, is practically tideless too, and wooded, not merely to the water's edge, but for hundreds of yards beyond that line the mangrove throws its encroaching arches forward, the still water making an azure floor to its leafy bowers. As to bracing sea breezes, no air is more relaxing than the tropical sea air. It is all very beautiful, especially when the sun is rising or setting over the lakelike expanse, reflecting a wonderfully rapid succession of the most delicate and exquisite tints; faintest crimson melting into pale rose, then salmon colour, then lilac, then a succession of mixed blending and contrasting hues that baffle description; finally, to outline the picture, row upon row of solemn stately palms sketched in ink against these tender backgrounds. But oh, how one longs for a breath of English sea air! The place B— have is in the wildest condition, much too steep and stony for doing much in the walking line. We had two riding horses with us, so we had plenty of time for poking about the house and exploring the old-fashioned little bungalow, with its odd little library, where all the books, many of them very valuable, are kept in mahogany wardrobes standing in rows instead of the usual arrangement of shelves, etc. F. W.— opened a small drawer in one of these wardrobes and took out several old ms. letters. One that particularly interested me was from the captain of the Northumberland, it gives such an interesting and graphic description of the 'great' Napoleon and of that memorable voyage to St. Helena. It is addressed to William James Hall, Esq., and is written very clearly and well on large paper gilt edged; the paper very yellow now, of course, and the writing pale and brown, but still perfectly legible. The postmark bears the date 26th July, 1816, and 7s. 6d. is written on it as the postage. The device on the large red seal is obliterated by the softening of the wax from the tropical heat. I was surprised to hear the letter had never been published, and with F. W.—'s consent have made a copy of it, which I send you. I have preserved the spelling of the original, which does not always conform to accepted rules, you will see, but I should think the too replete *too* ('object too') must have been a *lapsus*

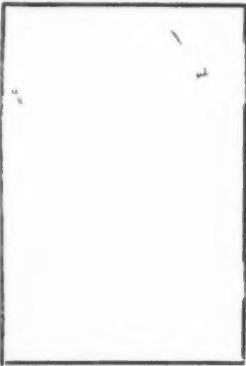
pluma even in those days of easy writing. I will only add that the genuineness of the letter is certified."

"Northumberland, 5th April, 1816.

"My dear Friend,—I have received your letter wherein you make inquiries after our mighty passenger which we carried to St. Helena. I will tell you all I know of him, but must first of all return you my sincere thanks for keeping me in your remembrance. I owe you much for many kindnesses received from you, and assure you I have in recollection a great many old friends in Jamaica who I often think of with sincere esteem and regard. I am now on my passage home, and as I probably may meet a vessel in the channel bound for Jamaica, I shall write a few lines to be in readiness.

"I hardly know how to begin about Bonaparte, and can hardly refer you to any newspaper, as few of those *Extracts of letters from the Northumberland ever came from her*. However, in a great hurry this ship was appointed to take him to St. Helena. From the anxiety shown by ministers to get him sent away you would have supposed their lives had depended upon it. Sir George Cockburn hoisted his flag on board her at Portsmouth on the 2nd August, and on the 3rd we sailed. On the 5th we fell in with Lord Keith, who was cruising for us, and anchored outside of Torbay, and were desired to prepare to receive Bonaparte and his suite the next day. Sir George was instructed amongst other things to examine his effects, which, however unpleasant, Bonaparte did not object too, but most violently protested against being sent to St. Helena. He had a very rich service of plate, and perhaps the most costly and beautiful service of porcelain ever made, a small field library, a middling stock of cloaths, and about four thousand Napoleons in money. His money, with the exception of two hundred Napoleons, by order of Government was sent to the Treasury. Thousands of people were anxious to see him, and of course the place was soon crowded with boats. About twelve o'clock the next day he came on board accompanied by Lord Keith. General Allemande came up the side first to announce him, and Bonaparte followed. He paid his compliments to the admiral rather handsomely, and immediately requested to be introduced to the captain. He asked a few commonplace questions, such as where I was born and how long I had been at sea, but didn't appear to me to care whether he got an answer or not. I felt very much disappointed, as I believe everybody else did, in his appearance, as I have never seen a picture of him that conveys his likeness to what he really is. He appears by no means that active man he is said to be. He is fat—rather what we call pot-bellied, and although his leg is well-shaped it is rather clumsy, and his walk appears rather affected, something between a waddle and a swagger, but probably not being used to the motion of a ship may have given him that appearance. He is very sallow, and quite light-grey

eyes, rather than greasy-looking brown hair, and altogether a very nasty priest-like looking fellow. He was dressed in a dark-green coat with gold epaulettes, white waistcoat and breeches, silk stockings, and shoes and buckles, which has been his constant dress. He wears two or three Orders, but one of them is a very large Star of the Legion of Honour. So much for his dress and appearance. I will give you our mode of passing a day, which will suffice for the whole passage, as we had him on board nearly ten weeks, and every day the same. He seldom made his appearance until about three o'clock in the afternoon, when he would enter into conversation with anybody upon deck, generally liking to have all the talk to himself. None of his own people ever appeared covered before him, nor do they now. They always styled him 'Sire,' or 'Your Majesty,' but John Bull was not quite so civil, as he never got more from us than any other general officer would. Indeed, he was received on board with the same salute, that of a captain's guard and three ruffles of the drum, as a general should be. To give you a little better idea of our party, we sat in the following way at dinner:—

		Captain Ross,		
Count Las Casas.			Madame Monthon.	
Grand Marshal Count Bertrand			Sir George Cockburn.	
Sir George Bingham.			Bonaparte.	
Officer.			Countess Bertrand.	
Officer.			General Monthon.	
General Gorgand			Any Stranger.	
Mr. Glover (Admiral's Secretary).				

Our dinner-hour was about four o'clock, and as soon as he had dined, according to the French custom, he got up from table, and, with Bertrand and Las Casas, went upon deck. In the evening about seven we all met again in the cabin and played a round game at cards. Sometimes Boney played chess or whist, but he generally preferred the round game. At ten he made his bow and retired for the night. One thing, he never gave the smallest trouble to any one, and every day was the same. He was very communicative, and seemed fond of being asked questions. His manners are by no means good, and his voice harsh and unpleasing. The day after our arrival at St. Helena we went on shore, and he returned me his thanks for my attention to him with rather a better grace than I should have given him credit for. He took up his abode at a gentleman's house about a mile from the town until the one appointed for him was ready, and I think it was three months before he got into it. He is now there, where I hope they will keep him. Indeed, if the same system is kept up which Sir George Cockburn began with, there is no doubt of it. He is about five miles from the town (the only one in the island), the house is now very good, and the grounds about it very pretty. The 53rd Regiment are encamped within half a mile of him, and there are sentrys all round. However, he has permission to ride out within certain bounds, attended by the captain of the guard, whenever he pleases. Dragoons are always patrolling about, and at night the piquets are drawn up close round the house. On our part, no vessel is permitted to approach the anchorage unless she may be in want of water or provisions. Even then a guard is put on board every one that anchors. Every boat upon the island is secured at sunset and put in charge of a guard. No person can be outside the town after nine o'clock without the countersign, and all the bridges and gates locked up at sunset but one. Our guard-boats are constantly out, and one vessel constantly cruising to windward and another to leeward. Therefore, as long as the present system is kept up, it will be next to impossible that he can escape, and the

strength of the place itself is very great. His house now is very good, having been very much added to, as there are about forty-four rooms in it. His establishment is numerous as to servants, and he has two carriages and twelve horses, but he comes out little, seldom before four o'clock in the afternoon. He is writing his life, some of which I saw, but as he is obliged to trust almost entirely to memory (which, by the by, is very good), it will take up a very long while. But he has a very able assistant in Count Las Casas and his son. An opportunity offering of sending this in makes me conclude, although I had little more to say than to offer you my kindest and sincerest regards.

"Believe me yours faithfully,

"CHARLES B. H. ROSS,"

William Cobbett, Earl Grey, and Lord Howick.

In Cobbett's "Tour in Scotland and in the Four Northern Counties of England in 1832," a book now rarely met with, we find some interesting notices of Earl Grey, the great Reform leader. Mr. Cobbett had genuine admiration for Lord Grey, and expected great things from him. "He is a man of great experience, great knowledge, and great talent. He has the power completely in his hands, and he must anxiously desire to see a happy settlement accomplished, and a great change effected in the condition of the people. The Reform Bill is only a means to that end. No man upon earth but himself has the power to do so much good. Let us hope, then, that he will do it; let us hope that he sees the necessity of great changes to be made; let us hope that he will set about these changes in earnest; and then shame upon the man who shall endeavour to thwart him or to drive him on faster than reason and justice demand." Much more is said to the same purport, and in a later letter Cobbett says: "I hear that Lord Howick, who is just married, made a speech here [at Alnwick] the other day, in which he said that the Reform was only the means to an end, and that the end was cheap government. Good, my lord!" adds Cobbett; "and as you are now married, pray let the country fellows and girls marry too. Let us have cheap government, and I warrant you that there will be room for us all, and plenty to eat and drink; it is the drones and not the bees that are too numerous." Does Earl Grey of 1885 remember this speech of 1832 when he was Lord Howick? He is as patriotic as ever, as his letters in the "Times" show.

Costliness of a Republic.

Some persons grumble at the costliness of royalty. If the money outlay on our Royal Family and monarchical institutions were tenfold what it is, the cost to the nation would be trifling compared with the national loss caused every four years by the Presidential election in the United States.

Dr. Macaulay, in his "Across the Ferry; or, First Impressions of America," says, "The loss of time, the disturbance of trade, the unsettlement of business and of credit, caused by every Presidential election, makes the real cost of the Republic manifold the expense of our monarchy. Ours is only a monarchy in name. It is a truer and better republic, with a hereditary instead of an elective head. The American President, during his term of office, has more power than befits a State professing to be democratic. By his veto he can obstruct good measures, and at his will can involve the nation in trouble. A vote of the House of Commons, expressing the popular voice, can control or displace our Government, which is not the case in America. The President has really more political power than our Premier, and far more than our Queen, who is the head of institutions which are absent in America, where there is no Court, no Established Church, no titled aristocracy, and no hereditary legislature."

As to the larger cost of an elective over a hereditary chief of the commonwealth, a remarkable illustration appears in the published returns of the United States Bankers' Clearing Houses for the week ending November 1, 1884, the election being on November 4. Compared with the returns for

1883, the decline was at the rate of not less than 37·5 per cent. The following table shows the details of the returns :

	1884.	1883.
New York	91,706,000	163,581,000
New England States	13,687,000	17,638,000
Middle States	11,973,000	15,618,000
Western States	12,831,000	15,334,000
Southern States	5,874,000	7,103,000
San Francisco	2,673,000	2,823,000
	£138,744,000	£222,097,000
Decrease in 1884—	£83,353,000.	

These bank clearings' returns are but an indication of the obstruction to business, and the loss caused all over the vast country every four years. An English parliamentary election is a trifling disturbance compared with it. We have little cause to grumble at the expensiveness of the hereditary monarchy, and may be thankful that our republic has not an elective head.

Conundrum.

I'm very fat—I'm very thin—
 I've neither blood, nor bones, nor skin.
 By nature blind as any bat,
 I'm full of light in spite of that.
 On nothing but myself I feed,
 So, while I last, I cannot need.
 Though I can swim, yet that I shun ;
 I cannot walk, yet often run.
 The outward aspect that I wear
 Is smooth and sleek and seeming fair ;
 But when the light betrays the art,
 I'm wicked proved, and black at heart.
 With nature sheepish—temper even—
 I oft at sixes am and seven.
 I typify the Church to many,
 But of religion ne'er had any.
 And if I'm flurried, dread my rage,
 Lest I your winding-sheet presage.
 Yet not without some grain of good,
 I too have had my melting mood.
 And drink is not 'mongst my demerits,
 Although I'm never out of spirits.
 The lesser weaknesses I own to,
 For smoking I am somewhat prone to.
 And, though I do not care to blab it,
 Yet snuffing is to me a habit.
 At Court in gold and frill I stand,
 But serve the poor with even hand.
 I no ambition have, nor pride,
 Nor care (of which Grimalkin died!).
 And though accustomed to a stick,
 'Tis not because I am old or sick.
 Indeed I thought I've lived for ever,
 Had not it been—that G-a-s-t-r-i-c Fever !

Beauties of Irish Journalism.

Journalists are supposed to be considerably above the average of the readers for whom they cater, both in intelligence and manners. After the many millions of pounds that have been paid from the national exchequer for promoting education in Ireland, it is discouraging to find such results as the following in popular Irish newspapers :

"Earl Spencer has committed crimes against liberty which they were committed by Queen Victoria by her sole authority upon her English lieges would cause her crowned head to roll in a basket. The high-spirited prerogative which the English Commons brought to the block when it was prac-

tised against themselves by their own anointed Sovereign they delegate freely to a Viceregal Kistlar Aga in Dublin, with no more divine attributes of royalty about him than a ragged robe of tinsel spangles and a palace as shabby as a range of decaying law chambers and filthier than a Seven Dials slum. The Viceroyalty of Ireland is unique in the museum of human impostures. The Viceroy, who is a mere marionette, as Earl Cowper was, is the foolishlest clay god ever set up for the adoration of awestruck grocers' wives. The Lord-Lieutenant of Earl Spencer's school, on the contrary, may be a man of third-class nobility, may be as dull as an ox, and as brutal in deed as he is knock-kneed in words ; but England lends him her conscience and her armies, invests him with deadlier weapons than the truncheon of a king, washes her hands of the consequences, turns away her virtuous eyes, and will not have evil spoken of him, though the groans of his victims and the curses of a country load the breeze. It is high time that Irish opinion organised itself for the destruction of this squalid despotism. A Chief Secretary is, at all events, a being of flesh and blood, and not a thing of tinsel shreds and patches. He can be seen with the naked eye, questioned, measured, and made known to all men as a brute like Mr. Forster or a crawler like Mr. Trevelyan."

Another Hibernian "leader of public opinion" thus instructs his poor deluded countrymen :

"So long as the Castle bloodhounds were sanctimoniously shuddering over the sins of this wicked land we left the pulpit to these hypocrites. We knew that their affected horror of agrarian crime was the horror of a glutton for dyspepsia. We knew that when murder suited their purpose, as when England was thrilled by the fate of Lord Frederick Cavendish in the Phoenix Park, their exultation was scarcely covered with a rag of decency. We knew that the only moral difference between the Green Captain Moonlight and his Orange rival in arms, whose revolverades were the pride and joy of the 'Daily Express,' was that the Orange *thaur a cing francs* undertook his villainies upon strict commercial principles, and struck work at the first touch of cold steel. We appreciated the fine feeling with which a blameless detective director from his velvet *prie-dieu* at the Castle dictated stern lessons of piety to a peasant with a speck of blood upon his hand. It was very much a question of casuistry which was the more pestilent set of criminals—those who shot defenceless people in the legs, or the official terrorists who organised the counter-carnival of legal butcheries in Green Street."

[We are glad to learn that a paragraph from the "Irish Times" about disgraceful scenes at a wake at Waterford has been declared by the mayor of that city to be exaggerated. We wish all success to the efforts of the Irish bishops and clergy to abolish these pagan customs, notwithstanding the classical account of a wake in Miss Edgeworth's "Castle Rackrent."—ED.]

The Niger and Congo.—Mr. Stanley, in his address at the opening of the Scottish Geographical Society at Edinburgh, as to the Niger, said :—"A railway of 150 miles long, from a point below Bussa to near Yauri, would give you 1,000 miles of the Upper Niger, by which you could supply some 18,000,000 of people above Bussa, as far as Timbaktu, Yawaru, Jenné, Sansanding, and Sego, where the Niger is as broad as the Thames at Westminster. Or a railway 300 miles long, from the head of navigation on the Rokel river, at the mouth of which Sierra Leone is situated, would take you to the Niger and furnish you with a river navigation of 1,000 miles. The great kingdoms of Waday, Bagirmi, Bornu, and Sokoto would become commercial tributaries to this country by these railway enterprises, which any half-dozen rich capitalists could cause to be made. That some effort has not been made is probably due to your ignorance of the little-known geography of these regions, and to the indefiniteness and uncertain ideas which possess you generally respecting Western Africa. I fear also that the Government is a little to blame for its proneness to cast cold water upon such projects, fearing the increasing obligations that would be entailed by any sudden expansion of commercial thought and extension of enterprise of this kind. Where there is a will, however, there is always a way, and if your rich people take to such projects kindly, as in the olden time your forefathers amplified their businesses, and built up this

Castell Henoff, about a quarter of a mile south of Porth Stinian, is a considerable work. Another is found at Porth Trewin, now broken into by a slate quarry, and again a far larger one at Pwllcaerog, well defended, and showing numerous marks of hut-circles, and a still larger one at Langharne, in Abercastell Bay, about a mile off.

The fortification at Pen Dewy (St. David's Head) is an important work of this class. There is an inner defence formed of surface-stones about twelve feet wide at the base and half of that in height; and then a hollow ditch, where the earth has been taken from the mound, and a high mound in a semicircular form corresponding to the neck of the promontory, and steepest on the outer side, covered with surface-stones, and forming really a formidable defence. The steep slope of the approach is strengthened here and there by additional ramparts. The area commands the sight of all the approaches. There are traces of regular courses of building stone facing the great bank. The name given to this work is "Clawddy-Millwyn" (the Warrior's Dyke). On the grassy spots within the area are apparent some remains of hut-dwellings or cattle-folds. It may be noted that most of these defences are on land which must always have been devoted to rough pasture, and consequently has been free from the ploughshare, and in situations where the adventurous modern builder has never appeared.

The cliff castles near Cape Cornwall at the Land's End are well marked, and precisely like those of Wales. They have usually three ditches and three banks, and these are skilfully combined in each instance with the natural rock features of the promontory. There are remains of a hut-circle in the Castle of Kenidjack. The most elaborate and considerable of these structures is Castle Trewyn, within which is the Logan Rock. One fine example occurs on the Island of St. Mary, Scilly, and is called the Giant's Castle.

Notwithstanding the wear and tear of the restless Atlantic, and all the violent influences of wind and weather, these works do not appear to have suffered very much diminution. Frequently the stones have been carried away for use, and the earth also, but on the whole they are remarkably well preserved.

A very slight acquaintance with them seems to show that they were not defences against invasion from the sea, but from the land. They are not connected with the landing-places, nor is there any way from them down to the beach in the great majority of instances. It is equally apparent that they were not towns or villages, or places of permanent abode. The situation of these barren promontories without water, with scanty food for sheep, torn by the winds, without shelter, or wood for fuel, precludes the idea of their having been anything save a temporary resort from the tempest of war, or a place for flocks and stores to be kept safe from the foe. The policy of the Celts when attacked, as they often were at one point by overwhelming numbers, was a policy of retreat to mountain fastnesses, or to these prepared resorts amongst the distant cliffs.

The common notion that these were fortifications thrown up by the Danish invaders on their predatory visits to our shores must be given up, although it has almost the strength of a tradition. No boat could land at the foot of these precipices, and if it did no mortal could climb the rocks, and if this were possible he could get nothing for his pains on the barren country above.

The difficulty of fixing the chronology of these works is enormous. From their style we may conclude that they were contemporaneous with the old camps which we call British, and which were probably pre-Roman as well as post-Roman. We may also consider them as contemporaneous with the oldest barrows and burial-places. Were they also contemporaneous with the monuments of Avebury, Stonehenge, and the numerous pillars, circles, and avenues, and with the sepulchral caves of Brittany and Cornwall, and the cromlechs? It may be argued that all these structures belong to one people, the Celts, that they were continued in use during and after the Roman invasion down or into the age of bronze, and even to that of iron. They cover at least a period of five hundred years, and belong to a definite epoch which begun with the irruption of the Celtic people who overcame the Iberian or Silurian race which had succeeded to the cave-dwellers and the river-drift men, and lasted down to the Roman occupation, and probably through this, and afterwards until the Anglo-Saxon conquest.

Tacitus says: "Whether the first inhabitants of Britain were natives of the island or adventurous settlers is a question lost in the mists of antiquity." The Britons, like other barbarous natives, have no monuments of their history, and we learn from Cæsar that the government was partly popular, under chiefs or kings, of which there were four in Kent alone. These earthworks show the prevalence of tribal wars and also the existence of communities, for without government and order such extensive and numerous works could not have been raised.

Brotier says of the ancient German tribes that in general pointed stones were prepared by them for weapons.

But we doubt whether our subject can be carried so far back in the stone age as to touch the Palæozoic, or drift period, and we unhesitatingly assign to them an age beginning with polished stone tools and poor pottery, and passing down to the ages of bronze and iron. Just as the Celts who mastered the aborigines of Britain became amalgamated with them so that all distinction was lost, so the Neolithic age runs down into that of metal, and the two subsist for a long time together, so that chronology is lost in the one case and ethnology is lost in the other.

The Celtic age clearly ranges from the stone age down to and inclusive of the early iron age. The *débris* found in the pits at Worle Hill, near Weston-super-Mare and elsewhere, display small stores of wheat and barley, bones of swine, of short-horned cattle, and lumps of ochre.

The description given by Tacitus affords a key to the few pre-Roman remains which we still possess. He says: "The Germans, it is well

known here, have no regular cities, nor do they allow a continuity of houses. They dwell in separate habitations, dispersed up and down, as a grove, a meadow, or a fountain happens to invite. They have villages, but not in our fashion, with a series of connected buildings. Every tenement stands detached, with a vacant piece of ground around it, either to prevent accidents by fire, or for want of skill in the art of building. They neither know the use of mortar or of tiles. They build with rude materials, regardless of beauty, order, and proportion. . . . Besides these habitations, they have a number of subterranean caves, dug by their own labour, and carefully covered over with litter, in winter their retreat from cold or the repository of their corn. In those recesses they not only find a shelter from the rigour of the season, but in times of foreign invasion their effects are safely concealed. The enemy lays waste the open country, but the hidden treasure escapes the general ravage, safe in its obscurity, or because the search would be attended with too much trouble.*

Mr. Ferguson ("Ancient Stone Monuments") claims Stonehenge as Arthurian and post-Roman, thus introducing a break in the succession of the stone age and bringing it down to a comparatively recent date. But this conclusion of the learned archæologist is not admitted. Soon after the Norman conquest the Celts ceased to have any nationality in England, and in Wales they formed a discontented portion of the old community driven into Wales and Cornwall. They retained their language in the former, but had accepted Christianity, and fortunately had lost those internal tribal distinctions which kept their forefathers in a perpetual state of turmoil, wars, and robberies. Indeed for some centuries before the Norman conquest they had been thus driven westward by the Saxons, as they had before this also been pressed by the Roman invaders. It is during the former part of their rule, during the prevalence of their own petty wars, and afterwards whilst they were subject to the raids of other hostile nationalities, that they were accustomed to fly

before the invader, take refuge in the barren cliff retreats, bury their scanty supplies, and return to their inland fields and pastures and villages as soon as the invader had retreated, owing to the exhaustion of all supplies. No authentic records exist of these centuries of suffering. The only memorials are the crumbling mound swept by the Atlantic breezes bearing its silent testimony in perfect solitude for the last thousand years. In the inner country we have more regular castles and camps, and the barrows and burial chambers, the cromlechs and the graves, with their grim contents—"All times are thine own, O death!"—but the footprints around the coast of Cornwall and Devon enable us to restore just so much of their living history as to excite the hope that such times and scenes may never return.

A glance at the one-inch ordnance survey map of our western coast serves to show the number in which these refuges existed, and therefore to prove the comparative populousness of the inland country at that time, but it is true, as Dr. Anderson says,* "there is no class of ancient remains of which we know less."

The curious works called dene-holes (dens) in Kent and Essex, near Bexley in the one county, and near Grays and East Tilbury in the other, and analogous constructions elsewhere, have considerable relation with the cliff castles, for both in all probability were used as granaries and storehouses and places where the scanty personal effects of the ancient Britons were hidden for safety, after the manner of the Germans noticed by Tacitus. Like the cliff castles, no written record exists respecting them. In all probability they belong to the same period as the intrenchments along the western coasts. No remains have been found hitherto on the floors of these caves attributable to the excavators, or to the people who used them, but broken pottery and flints are contained in the *débris* as well as the side markings made by the agonised furious scratchings of wretched animals hopelessly incarcerated as in a pitfall until death overtook them in hunger and darkness. S. R. P.

* Murphy's "Tacitus," vol. vii. p. 27.

* Anderson, p. 271.

ISLAM AND CHRISTIANITY.*

THERE can be no question but that, with its pure monotheism, and a code founded in the main on justice and humanity, Islam raises to a higher level races sunk in idolatry and fetichism, like those of Central Africa, and that in some respects—notably in that of temperance—it materially improves the morality of such peoples. But, having raised them to a certain point, it leaves them there. Whether in things

secular or spiritual, there is no advance. The defects of which I have been treating cling to the outer life; and as regards the inner life, there is, in the cold and formal round of Moslem ordinance, altogether wanting the genial and motive power of the Heavenly Father's love.

When, again, we come to compare Islam with Christianity, and first in its secular aspect, one is immediately struck with the difference between the two in the virtue of adaptation to the wants and aspirations of humanity. Islam imposes a code, hard, fast, and imperative in every detail,

* "Mahomet and Islam." By Sir William Muir, K.C.S.I. The Religious Tract Society.

which, however well it may have suited Arabia thirteen centuries ago, is quite unfitted for the varying requirements of other times and places. Yet it binds society hand and foot; there can be no onward, upward movement, nor even the attempt to rise.

The Christian code is altogether different. It lays down principles, and not details. If there be one exception—that, namely, in respect of marriage and divorce—it is expressly based on the laws of nature. "He," said Jesus, "which made them at the beginning, made them male and female . . . what, therefore, God hath joined together, let not man put asunder." The foundations of Christian morality are not less immutable than those of the Coran, but they are infinitely broader, and can be built on for all generations. Its laws are capable of being applied to the habits, thought, and institutions of all ages, and its doctrines harmonise with every upward step towards freedom, knowledge, and philanthropy; indeed, we may say, themselves contain the plastic force which brings these results about. In short, the distinction between the two creeds is, that while the aspirations of humanity have free play under the Gospel, in the swathing bands of the Coran they are altogether checked and stifled.

There is perhaps no greater contrast in the precepts of the two religions than that relating to the sword. As an instrument for the propagation of the faith (however practice may often have widely differed from precept), the use of the sword is abjured by the Gospel,* while it is commanded by the Coran. Before the Flight, Mahomet was profuse in his declarations that there should be "no constraint in religion." But so soon as he came to power he drew the sword, never, as the reader knows, again to sheathe it; and his followers have not been slow to tread in his steps. "My kingdom," said Jesus Christ to the Roman governor, "is not of this world: if My kingdom were of this world, then would My servants fight, that I should not be delivered to the Jews: but now is My kingdom not from hence."†

Turning to the spiritual aspect of the two faiths, a wide difference exists between the ordinances of Islam, rigidly tied down as they are to time, and in one respect to place, and those of the Gospel, which can be suited to the changing circumstances of the moment, and the varying demands of clime and season. The obligation to pray in stereotyped form at so many stated hours of the day is prone to degenerate into a lifeless worship, though I am far from asserting that it is always so. Much the same may be said of fasting and pilgrimage, the latter being an ordinance practically unattainable by multitudes, and the former, according to the stringent rule of the Coran, altogether impracticable in some zones of

the earth.‡ The contrast with the spirit and precept of the Gospel, and the simplicity of its two positive ordinances, is too patent to need dwelling on.

Again, while the Coran represents God as Creator, Ruler, and Preserver, the Rewarder of good and evil, and the Hearer of prayer, it nowhere recognises Him as a Father, much less the Father of our Lord Jesus Christ. The sentiment of the Moslem partakes, therefore, of the fear of a servant more than the love of a son. The office of the Holy Spirit as Regenerator is unknown, and the death and resurrection of Christ are denied. There is thus in Islam nothing answering to the grace of redemption, and consequently the grand power of the Gospel—namely, the love of Christ as a constraining influence—is wanting; nor is there the approach to anything that might supply its place.

To put the matter shortly, each religion is an embodiment of its founder. Mahomet sought power; he fought against those who denied his claims; he put a whole tribe to the sword; he filled his harem with women, bond and free; he cast aside, when they had served his purpose, the Jewish and Christian Scriptures, and he engrafted his faith on the local superstition of his birth-place. He did all these things under cover of an alleged Divine authority, but he did no miracle.

The life of Jesus is all in contrast. He spake and taught as one having the inherent authority in Himself; but He could also say, "The works that I do in My Father's name, they bear witness of Me." He was holy, harmless, undefiled. He pleased not Himself. Though rich, he became poor, that we through His poverty might become rich. He made Himself of no reputation, and took upon Him the form of a servant. He was despised and rejected of men. He humbled Himself, and became obedient unto death, even the death of the cross.

Is there any common point whatever in the two lives? "He that is of the earth is earthy, and speaketh of the earth; He that cometh from heaven is above all."

Where in the Coran are to be found words like these, descriptive at once of the new life and of the Giver Himself? "I am the Resurrection, and the Life: he that believeth in Me, though he were dead, yet shall he live: and whosoever liveth and believeth in Me shall never die."

And again, "I am the Good Shepherd: the Good Shepherd giveth His life for the sheep."

And yet again, "Come unto Me, all ye that labour and are heavy laden, and I will give you rest. Take My yoke upon you, and learn of Me; for I am meek and lowly in heart: and ye shall find rest unto your souls. For My yoke is easy, and My burden is light."

* Matt. xxvi. 52; John xviii. 36.

‡ As where all is day or all is night, or nearly so, in the month of Ramadhan.



Shepley

BORN APRIL 28, 1801.

[Reduced from a large engraving in "The Cottager and Artisan."]

HINTS FOR THE IMPROVEMENT OF THE DWELLINGS OF ARTISANS AND LABOURERS.

FOR a long period most persons who have thought seriously of the important subject of how permanently to improve the physical, moral, and social condition of the labouring population of this country, have come to the conclusion that one of the first steps to be taken in bringing about so desirable a state of things, is to improve the dwellings of the labourers. In London and other large cities and towns something has been done towards remedying the evils that exist by erecting model lodging-houses, and these have proved an invaluable boon to all who are enjoying the comforts which they afford, and have tended greatly to improve the health of the dwellers in the districts in which they are placed. What has been done, however, in this respect, is small indeed compared with what is absolutely needed to meet the entire necessities of the case, and it is much to be hoped that those who have the power and the will to assist in carrying on so good and so important a work will aid to the utmost extent all well-devised schemes.

In country villages and on the estates of our large landed proprietors* some attention has also been given of late years to the state of the cottages of the working classes, and many have been either rebuilt entirely or remodelled and made far more conducive to health and morality. Notwithstanding, however, what has been already done in the matter, much, very much, remains to be accomplished, and as it is of the very first importance that whatever is attempted should be in conformity with a well-considered plan likely to attain the desired object, it will, it is believed, prove useful to proprietors and others to state briefly the essential requisites for comfortable and convenient labourers' cottages in the country.

1. The cottages should be placed near a public road, as being more cheerful than a solitary situation. The main object in building a cottage being to produce a comfortable dwelling, a dry, airy situation should be chosen, and, if possible, the ground should fall gently from the cottage on one side. If possible the aspect should be one that will allow the sun to shine on every side of the cottage a portion of every day in the year when it is visible.

2. Every cottage ought to have the floor elevated that it may be dry; the walls double or hollow, or battened, or not less than eighteen inches thick, that they may retain heat, with a course of slate, or flagstone, or tiles bedded in cement, six inches above the surface, to prevent the rising of damp, or a floor of thick blocks of wood laid on concrete; the roof thick or double, for the sake of

warmth, and projecting eighteen inches or two feet at the eaves, in order to keep the walls dry, and to check the radiation of heat from their exterior surface. The advantages of thick walls, and of thick or double roofs of high pitch, and projecting at the eaves, with reference to retaining heat, are greater than can well be conceived by those who have not dwelt in a cottage. A high and dry floor is essential, whether this be secured by placing the cottage on a terrace, or by raising the floor inside, and ascending to it by outside steps.

3. In general every cottage ought to have upstairs rooms, so that the sleeping apartments may not be on the ground floor, and the ground floor ought not to be less than from six inches to one foot above the outer surface.

4. The minimum of accommodation ought to be a kitchen or living-room, a back kitchen or wash house, and a pantry on the ground floor, with three bedrooms over; or two rooms and a wash-house on the ground floor, and two bedrooms over.

5. Every cottage, including its garden, yard, etc., ought to occupy not less than one-sixth of an acre, and the garden ought, if possible, to surround the cottage, or at all events to extend both before and behind. At any rate there ought in general to be a front garden and a back yard, the latter being entered from the back kitchen, and containing all the requisite conveniences. Cottage allotments, by which are to be understood portions of ground in a field allotted to cottages at some distance, are much better than no gardens at all; but they are far from producing the comfort and enjoyment of a garden in close contact with the cottage to which it belongs.

6. If practicable, every cottage ought to stand singly and surrounded by its garden, or at all events not more than two cottages ought to be placed together. Among other important arguments in favour of this arrangement it may be mentioned that it is the only one by which the sun can shine every day on every side of the cottage. When cottages are joined together in a row, unless that row is in a diagonal direction with reference to a south and north line, the sun will shine chiefly on one side. By having cottages singly or in pairs they may always be placed along any road in such a manner that the sun may shine on every side of them, provided the point be given up of having the front parallel to the road, a point which ought not for a moment to be put in competition with the advantages of an equal diffusion of sunshine.

7. Every cottage ought to have an entrance porch for containing the labourer's tools, and into which, if possible, the stairs ought to open, in order that the bedrooms may be communicated with without passing through the front or back

* On the estates of a great many of our nobility and gentry it is most gratifying to see the admirable, nay perfect, cottages which have been built, notably at Edenson, in Derbyshire, by the Duke of Devonshire, and at Cambo, in Northumberland, and Nettlecombe, in Somersetshire, by the late Sir Walter Calverley Trevelyan, Bart.

kitchen. This, in the case of sickness, is very desirable.

8. The door to the front kitchen, or best room, should open from the porch, and not from the back kitchen.

9. When there is not a supply of pure water from a spring adjoining the cottage, or from some other efficient source, then there ought to be a well, and there should also be a tank, partly under the floor of the back kitchen, supplied from the roof, with a pump in the back kitchen for drawing it up for use. The advantages of having a tank under the back kitchen are, that it will be secure from

frost, and that the labour of carrying water will be avoided. A constant supply of pure water is of the greatest importance, and ought at all times to receive the most careful consideration when fixing on sites for cottages.

Most of the conditions now stated are laid down on the supposition that in building cottages for the labourers, the proprietors are actuated more by feelings of human sympathy than by a desire to make money. Hence these remarks are addressed not to speculating builders but to the wealthy, and especially to proprietors of land and extensive manufactories, and mines.

D. W.

Varieties.

Napoleon the First.

As everything relating to "great men" is of interest, I think it likely that the following letter in which Napoleon Bonaparte is the chief figure is worth perusal. It has been sent to me by a lady for some years a resident in Jamaica. The extract from her letter will show how it came into her hands, and also gives a charming little vignette from the scenery of that lovely and luckless island. She writes: "We have been paying a visit to our old friend F. W.—. The place he lives at is charming, with one of the most exquisite tropical sea views you can imagine—very different, that is, from the rolling breakers, grey uneasy waters, wild winds, stern cliffs or yellow sands of our English coasts, especially in the tumult of their winter time. Here, though it is January, the placid blue water is bounded and broken by green islets, is practically tideless too, and wooded, not merely to the water's edge, but for hundreds of yards beyond that line the mangrove throws its encroaching arches forward, the still water making an azure floor to its leafy bowers. As to bracing sea breezes, no air is more relaxing than the tropical sea air. It is all very beautiful, especially when the sun is rising or setting over the lakelike expanse, reflecting a wonderfully rapid succession of the most delicate and exquisite tints; faintest crimson melting into pale rose, then salmon colour, then lilac, then a succession of mixed blending and contrasting hues that baffle description; finally, to outline the picture, row upon row of solemn stately palms sketched in ink against these tender backgrounds. But oh, how one longs for a breath of English sea air! The place B— have is in the wildest condition, much too steep and stony for doing much in the walking line. We had two riding horses with us, so we had plenty of time for poking about the house and exploring the old-fashioned little bungalow, with its odd little library, where all the books, many of them very valuable, are kept in mahogany wardrobes standing in rows instead of the usual arrangement of shelves, etc. F. W.— opened a small drawer in one of these wardrobes and took out several old M^s. letters. One that particularly interested me was from the captain of the *Northumberland*, it gives such an interesting and graphic description of the 'great' Napoleon and of that memorable voyage to St. Helena. It is addressed to William James Hall, Esq., and is written very clearly and well on large paper gilt edged; the paper very yellow now, of course, and the writing pale and brown, but still perfectly legible. The postmark bears the date 26th July, 1816, and 7s. 6d. is written on it as the postage. The device on the large red seal is obliterated by the softening of the wax from the tropical heat. I was surprised to hear the letter had never been published, and with F. W.—'s consent have made a copy of it, which I send you. I have preserved the spelling of the original, which does not always conform to accepted rules, you will see, but I should think the too replete *too* ('object too') must have been a *lapsus*

plume even in those days of easy writing. I will only add that the genuineness of the letter is certified."

"Northumberland, 5th April, 1816.

"My dear Friend,—I have received your letter wherein you make inquiries after our mighty passenger which we carried to St. Helena. I will tell you all I know of him, but must first of all return you my sincere thanks for keeping me in your remembrance. I owe you much for many kindnesses received from you, and assure you I have in recollection a great many old friends in Jamaica who I often think of with sincere esteem and regard. I am now on my passage home, and as I probably may meet a vessel in the channel bound for Jamaica, I shall write a few lines to be in readiness.

"I hardly know how to begin about Bonaparte, and can hardly refer you to any newspaper, as few of those *Extracts of letters from the Northumberland* ever came from her. However, in a great hurry this ship was appointed to take him to St. Helena. From the anxiety shown by ministers to get him sent away you would have supposed their lives had depended upon it. Sir George Cockburn hoisted his flag on board her at Portsmouth on the 2nd August, and on the 3rd we sailed. On the 5th we fell in with Lord Keith, who was cruising for us, and anchored outside of Torbay, and were desired to prepare to receive Bonaparte and his suite the next day. Sir George was instructed amongst other things to examine his effects, which, however unpleasant, Bonaparte did not object too, but most violently protested against being sent to St. Helena. He had a very rich service of plate, and perhaps the most costly and beautiful service of porcelain ever made, a small field library, a middling stock of cloaths, and about four thousand Napoleons in money. His money, with the exception of two hundred Napoleons, by order of Government was sent to the Treasury. Thousands of people were anxious to see him, and of course the place was soon crowded with boats. About twelve o'clock the next day he came on board accompanied by Lord Keith. General Allemande came up the side first to announce him, and Bonaparte followed. He paid his compliments to the admiral rather handsomely, and immediately requested to be introduced to the captain. He asked a few commonplace questions, such as where I was born and how long I had been at sea, but didn't appear to me to care whether he got an answer or not. I felt very much disappointed, as I believe everybody else did, in his appearance, as I have never seen a picture of him that conveys his likeness to what he really is. He appears by no means that active man he is said to be. He is fat—rather what we call pot-bellied, and although his leg is well-shaped it is rather clumsy, and his walk appears rather affected, something between a waddle and a swagger, but probably not being used to the motion of a ship may have given him that appearance. He is very sallow, and quite light-grey

eyes, rather thin greasy-looking brown hair, and altogether a very nasty priest-like looking fellow. He was dressed in a dark-green coat with gold epaulettes, white waistcoat and breeches, silk stockings, and shoes and buckles, which has been his constant dress. He wears two or three Orders, but one of them is a very large Star of the Legion of Honour. So much for his dress and appearance. I will give you our mode of passing a day, which will suffice for the whole passage, as we had him on board nearly ten weeks, and every day the same. He seldom made his appearance until about three o'clock in the afternoon, when he would enter into conversation with anybody upon deck, generally liking to have all the talk to himself. None of his own people ever appeared covered before him, nor do they now. They always styled him 'Sire,' or 'Your Majesty,' but John Bull was not quite so civil, as he never got more from us than any other general officer would. Indeed, he was received on board with the same salute, that of a captain's guard and three ruffles of the drum, as a general should be. To give you a little better idea of our party, we sat in the following way at dinner:—

Captain Ross.	
Count Las Casas.	Madame Monthon.
Grand Marshal Count Bertrand	Sir George Cockburn.
Sir George Bingham.	Bonaparte.
Officer.	Countess Bertrand.
Officer.	General Monthon.
General Gorgand	Any Stranger.
Mr. Glover (Admiral's Secretary).	

Our dinner-hour was about four o'clock, and as soon as he had dined, according to the French custom, he got up from table, and, with Bertrand and Las Casas, went upon deck. In the evening about seven we all met again in the cabin and played a round game at cards. Sometimes Boney played chess or whist, but he generally preferred the round game. At ten he made his bow and retired for the night. One thing, he never gave the smallest trouble to any one, and every day was the same. He was very communicative, and seemed fond of being asked questions. His manners are by no means good, and his voice harsh and unpleasing. The day after our arrival at St. Helena we went on shore, and he returned me his thanks for my attention to him with rather a better grace than I should have given him credit for. He took up his abode at a gentleman's house about a mile from the town until the one appointed for him was ready, and I think it was three months before he got into it. He is now there, where I hope they will keep him. Indeed, if the same system is kept up which Sir George Cockburn began with, there is no doubt of it. He is about five miles from the town (the only one in the island), the house is now very good, and the grounds about it very pretty. The 53rd Regiment are encamped within half a mile of him, and there are sentrys all round. However, he has permission to ride out within certain bounds, attended by the captain of the guard, whenever he pleases. Dragoons are always patrolling about, and at night the piquets are drawn up close round the house. On our part, no vessel is permitted to approach the anchorage unless she may be in want of water or provisions. Even then a guard is put on board every one that anchors. Every boat upon the island is secured at sunset and put in charge of a guard. No person can be outside the town after nine o'clock without the countersign, and all the bridges and gates locked up at sunset but one. Our guard-boats are constantly out, and one vessel constantly cruising to windward and another to leeward. Therefore, as long as the present system is kept up, it will be next to impossible that he can escape, and the

strength of the place itself is very great. His house now is very good, having been very much added to, as there are about forty-four rooms in it. His establishment is numerous as to servants, and he has two carriages and twelve horses, but he comes out little, seldom before four o'clock in the afternoon. He is writing his life, some of which I saw, but as he is obliged to trust almost entirely to memory (which, by the by, is very good), it will take up a very long while. But he has a very able assistant in Count Las Casas and his son. An opportunity offering of sending this in makes me conclude, although I had little more to say than to offer you my kindest and sincerest regards.

"Believe me yours faithfully,

"CHARLES B. H. ROSS."

William Cobbett, Earl Grey, and Lord Howick.

In Cobbett's "Tour in Scotland and in the Four Northern Counties of England in 1832," a book now rarely met with, we find some interesting notices of Earl Grey, the great Reform leader. Mr. Cobbett had genuine admiration for Lord Grey, and expected great things from him. "He is a man of great experience, great knowledge, and great talent. He has the power completely in his hands, and he must anxiously desire to see a happy settlement accomplished, and a great change effected in the condition of the people. The Reform Bill is only a means to that end. No man upon earth but himself has the power to do so much good. Let us hope, then, that he will do it; let us hope that he sees the necessity of great changes to be made; let us hope that he will set about these changes in earnest; and then shame upon the man who shall endeavour to thwart him or to drive him on faster than reason and justice demand." Much more is said to the same purport, and in a later letter Cobbett says: "I hear that Lord Howick, who is just married, made a speech here [at Alnwick] the other day, in which he said that the Reform was only the means to an end, and that the end was cheap government. Good, my lord!" adds Cobbett; "and as you are now married, pray let the country fellows and girls marry too. Let us have cheap government, and I warrant you that there will be room for us all, and plenty to eat and drink; it is the drones and not the bees that are too numerous." Does Earl Grey of 1885 remember this speech of 1832 when he was Lord Howick? He is as patriotic as ever, as his letters in the "Times" show.

Costliness of a Republic.

Some persons grumble at the costliness of royalty. If the money outlay on our Royal Family and monarchical institutions were tenfold what it is, the cost to the nation would be trifling compared with the national loss caused every four years by the Presidential election in the United States.

Dr. Macaulay, in his "Across the Ferry; or, First Impressions of America," says, "The loss of time, the disturbance of trade, the unsettlement of business and of credit, caused by every Presidential election, makes the real cost of the Republic manifold the expense of our monarchy. Ours is only a monarchy in name. It is a truer and better republic, with a hereditary instead of an elective head. The American President, during his term of office, has more power than befits a State professing to be democratic. By his veto he can obstruct good measures, and at his will can involve the nation in trouble. A vote of the House of Commons, expressing the popular voice, can control or displace our Government, which is not the case in America. The President has really more political power than our Premier, and far more than our Queen, who is the head of institutions which are absent in America, where there is no Court, no Established Church, no titled aristocracy, and no hereditary legislature."

As to the larger cost of an elective over a hereditary chief of the commonwealth, a remarkable illustration appears in the published returns of the United States Bankers' Clearing Houses for the week ending November 1, 1884, the election being on November 4. Compared with the returns for

1883, the decline was at the rate of not less than 37·5 per cent. The following table shows the details of the returns :

	1884.	1883.
New York	91,706,000	163,581,000
New England States	13,687,000	17,638,000
Middle States	11,973,000	15,618,000
Western States	12,831,000	15,334,000
Southern States	5,874,000	7,103,000
San Francisco	2,673,000	2,823,000
	£138,744,000	£222,097,000
	Decrease in 1884—£83,353,000.	

These bank clearings' returns are but an indication of the obstruction to business, and the loss caused all over the vast country every four years. An English parliamentary election is a trifling disturbance compared with it. We have little cause to grumble at the expensiveness of the hereditary monarchy, and may be thankful that our republic has not an elective head.

Conundrum.

I'm very fat—I'm very thin—
I've neither blood, nor bones, nor skin.
By nature blind as any bat,
I'm full of light in spite of that.
On nothing but myself I feed,
So, while I last, I cannot need.
Though I can swim, yet that I shun ;
I cannot walk, yet often run.
The outward aspect that I wear
Is smooth and sleek and seeming fair ;
But when the light betrays the art,
I'm wicked proved, and black at heart.
With nature sheepish—temper even—
I oft at sixes am and seven.
I typify the Church to many,
But of religion ne'er had any.
And if I'm flurried, dread my rage,
Lest I your winding-sheet presage.
Yet not without some grain of good,
I too have had my melting mood.
And drink is not 'mongst my demerits,
Although I'm never out of spirits.
The lesser weaknesses I own to,
For sinning I am somewhat prone to.
And, though I do not care to blab it,
Yet snuffing is to me a habit.
At Court in gold and frill I stand,
But serve the poor with even hand.
I no ambition have, nor pride,
Nor care (of which Grimaldine died).
And though accustomed to a stick,
'Tis not because I am old or sick.
Indeed I thought I'd have lived for ever,
Had not it been—that G-a-s-t-r-i-c Fever !

Beauties of Irish Journalism.

Journalists are supposed to be considerably above the average of the readers for whom they cater, both in intelligence and manners. After the many millions of pounds that have been paid from the national exchequer for promoting education in Ireland, it is discouraging to find such results as the following in popular Irish newspapers :

"Earl Spencer has committed crimes against liberty which if they were committed by Queen Victoria by her sole authority upon her English lieges would cause her crowned head to roll in a basket. The high-spirited prerogative which the English Commons brought to the block when it was prac-

tised against themselves by their own anointed Sovereign they delegate freely to a Viceregal Kishlar Aga in Dublin, with no more divine attributes of royalty about him than a ragged robe of tinsel spangles and a palace as shabby as a range of decaying law chambers and filthier than a Seven Dials slum. The Viceroyalty of Ireland is unique in the museum of human impostures. The Viceroy, who is a mere marionette, as Earl Cowper was, is the foolishlest clay god ever set up for the adoration of awestruck grocers' wives. The Lord-Lieutenant of Earl Spencer's school, on the contrary, may be a man of third-class nobility, may be as dull as an ox, and as brutal in deed as he is knock-kneed in words ; but England lends him her conscience and her armies, invests him with deadlier weapons than the truncheon of a king, washes her hands of the consequences, turns away her virtuous eyes, and will not have evil spoken of him, though the groans of his victims and the curses of a country load the breeze. It is high time that Irish opinion organised itself for the destruction of this squalid despotism. A Chief Secretary is, at all events, a being of flesh and blood, and not a thing of tinsel shreds and patches. He can be seen with the naked eye, questioned, measured, and made known to all men as a brute like Mr. Forster or a crawler like Mr. Trevelyan."

Another Hibernian "leader of public opinion" thus instructs his poor deluded countrymen :

"So long as the Castle bloodhounds were sanctimoniously shuddering over the sins of this wicked land we left the pulpit to these hypocrites. We knew that their affected horror of agrarian crime was the horror of a glutton for dyspepsia. We knew that when murder suited their purpose, as when England was thrilled by the fate of Lord Frederick Cavendish in the Phoenix Park, their exultation was scarcely covered with a rag of decency. We knew that the only moral difference between the Green Captain Moonlight and his Orange rival in arms, whose revolvers were the pride and joy of the 'Daily Express,' was that the Orange *tueur a cinq francs* undertook his villainies upon strict commercial principles, and struck work at the first touch of cold steel. We appreciated the fine feeling with which a blameless detective director from his velvet *prie-dieu* at the Castle dictated stern lessons of piety to a peasant with a speck of blood upon his hand. It was very much a question of casuistry which was the more pestilent set of criminals—those who shot defenceless people in the legs, or the official terrorists who organised the counter-carnival of legal butcheries in Green Street."

[We are glad to learn that a paragraph from the "Irish Times" about disgraceful scenes at a wake at Waterford has been declared by the mayor of that city to be exaggerated. We wish all success to the efforts of the Irish bi-hops and clergy to abolish these pagan customs, notwithstanding the classical account of a wake in Miss Edgeworth's "Castle Rackrent."—ED.]

The Niger and Congo.—Mr. Stanley, in his address at the opening of the Scottish Geographical Society at Edinburgh, as to the Niger, said :—"A railway of 150 miles long, from a point below Bussa to near Yauri, would give you 1,000 miles of the Upper Niger, by which you could supply some 18,000,000 of people above Bussa, as far as Timbuktou, Yawaru, Jenné, Sansanding, and Sego, where the Niger is as broad as the Thames at Westminster. Or a railway 300 miles long, from the head of navigation on the Rokel river, at the mouth of which Sierra Leone is situated, would take you to the Niger and furnish you with a river navigation of 1,000 miles. The great kingdoms of Waday, Bagirmi, Bornu, and Sokoto would become commercial tributaries to this country by these railway enterprises, which any half-dozen rich capitalists could cause to be made. That some effort has not been made is probably due to your ignorance of the little-known geography of these regions, and to the indefiniteness and uncertain ideas which possess you generally respecting Western Africa. I fear also that the Government is a little to blame for its proneness to cast cold water upon such projects, fearing the increasing obligations that would be entailed by any sudden expansion of commercial thought and extension of enterprise of this kind. Where there is a will, however, there is always a way, and if your rich people take to such projects kindly, as in the olden time your forefathers amplified their businesses, and built up this

widespread Empire, the project I have indicated to you will seem but small compared to the rewards which always follow such high-spirited and broad-minded ventures. That such a scheme is not impossible is proved by the fact that the French are actually building a railroad from the Senegal to Sego, to absorb a trade which should have been British. When it is completed they will have an opportunity to increase their trade to the extent of £30,000,000 annually." Turning to the Congo, Mr. Stanley said: "Seven years ago the character of this basin and utility of the river were made known for the first time. The geographical knowledge thus acquired cost about £12,000 in English money and the lives of 173 men. It was given to the world freely in about twelve numbers of the 'Daily Telegraph' and the 'New York Herald,' each costing about one penny, and afterwards in book form, with maps and pictures, illustrating the geography and life of the peoples. To us the river has become as familiar as the Mississippi is to its navigators. The banks and its peoples are well known. The great basin now lies mentally mapped out; it has lost its mystery, and been deprived of its power to awe. We know that wide plains, growing pasture fit for cattle, separate these rivers; infinite spaces, fit for thrifty and industrious colonists, promise reward to those who seek them. The river margins show wide belts of forest; in their deep, frondent shade clusters of villages lie nestled, and close by are the prolific gardens and fields, blessing the careless, happy people with a profuse abundance."

W. Wells Brown.—The death is announced of an eminent and representative negro, Dr. W. Wells Brown, of Boston, Massachusetts, in his sixty-ninth year. Dr. Brown was born at Lexington in 1816, his mother being a slave. At an early age he was hired out to a captain of a steamboat plying between St. Louis and New Orleans, and afterwards became an office boy under Elijah Lovejoy, the editor of the "St. Louis Times," where he received the elements of his education. Becoming in 1834 a steward on a Lake Erie steamer, he assisted in the flight of slave fugitives to Canada, organising a vigilance committee with that object. In 1843 he became a lecturer for the Anti-Slavery Society, coming over to England in that capacity in 1849, and being afterwards chosen by the American Peace Society as a delegate to the Peace Congress in Paris, where his speeches won for him warm greetings from Victor Hugo, Richard Cobden, and other notables. On his return to America he took an active and successful part in raising the social and political status of the coloured population, and organising night and other schools among the freed people of the South. He was an associate in these moral movements with Wendell Phillips, Lloyd Garrison, and other prominent Abolitionists, and attained a wide and well-deserved literary reputation. His works included "Three Years in Europe," a record of travel; "Clotelle, or the President's Daughter," a narrative of slave life in the Southern States; "Sketches of Places and People Abroad;" and two dramas entitled "Dough Face" and "The Leap for Freedom."

Coolies in Trinidad.—Attention having been directed to the coolies in the West Indies, from the unfortunate disturbances connected with some religious processions, Dr. Dalton, who was attached for sixteen years to the Coolie Immigration Service, gives the following account of their general condition in apprenticeship:—"I was a surgeon in the emigration service for two years, and can only contrast the poor, abject, slouching, half-starved individual who crawled on board ship at Garden Reach, Calcutta, with the erect, self-important man who struts about his West Indian home, clothed in gaudy raiment, with a goodly balance at the local savings-bank. It ought to be known that the so-called slavery is simply an apprenticeship to learn a new business. Food, good and ample, is found for the first six months, a small amount being taken from the weekly wage to refund the employer. House room is found, and, in case of sickness, better hospitals and attendance than can be found in most English villages are provided. Again, the Education Act applies, and all the youngsters are compelled to attend school some hours every day. Hardships occasionally do occur, as in other parts of the world; but there is always the immigration agent or the local magistrate whence to seek redress, and many barristers, who make a good

living out of the coolie, for the latter loves to go to law. Woe to the white man who raises his hand in anger to the coolie; the local beak will lecture him first and fine him afterwards. A very practical result of the system is this. Every year ships take back to India returning emigrants, with on an average 30,000 dols. to 40,000 dols. between some 400 to 500 souls, exclusive of quantities of jewellery, often of great value; and, strange as it may appear, incoming ships bring back many coolies who have spent or lost their money, who are very willing to return to their former so-called slavery in order to get more; and not only that, but bring relatives and friends. Some rise in the scale of society, become hotel-keepers, owners of race-horses, cattle farms, cab proprietors, etc. In conclusion, contrast the West Indian coolie with the condition of our labouring classes in the bitter winter."

My First Camel Ride.—One of the London war correspondents in the Soudan gave an amusing account of his first ride on a camel:—"A few days ago I had my first ride on a camel, and I thought it would have been my last. It was to go to our camp that I got cross-legged upon an Arab saddle, insecurely fastened by strings upon the back of a great lumbering, hump-backed brute. I no sooner attempted to take my place on the saddle than the camel, which was lying prone, into which position he had been forced, began grunting like an old village pump violently worked. At the same time he turned his prehensile lips aside, grinned like a bulldog, and showed a grinning row of teeth, which he sought to close upon me. I got aboard without accident, and had not long to wait for a rise. The first movement, as he lifted his forelegs, nearly sent me over backwards; the next, as he straightened his hind legs, still more nearly tipped me over his head. I had been warned to hold tight, but it was only the clutch of desperation that saved me. After several lunges and plunges, the brute got fairly on his legs. The reins consisted of a rope round his neck for steering, and a string fastened to a ring thrust in his nostrils to pull up his head and stop him when going too fast. My camel began to move forward, and thereupon I oscillated and see-sawed as if seized with sea-sickness or cramp in the stomach. Involuntary as the movement was, an hour of it would, I am sure, have made as abject a victim of me as the worst sufferer on a Channel passage. A heartless friend was in front of me on another camel, which he set trotting. Instantly I became as helpless as a child, for my camel disregarded the strain on his nostrils and my fervent ejaculations. My profane Arabic vocabulary was too limited to have the slightest effect. I swayed to and fro, was bumped up and down, until I was almost shaken to pieces. It would have been a positive relief could I have found myself at rest on the ground, but the motion was so incessant I had not time to make up my mind what course to adopt. It ended as even experiences of the worst kind must do, and I found myself still on the camel's back. Not so my humorous friend, who, to my great comfort, performed a double somersault and did not succeed in landing quite on his feet. I was told I would become accustomed to camel-riding, and might even get to like it. But my faith is not great enough for that."

Discipline and Drill.—Prince Albert Victor of Wales, in addressing the Cambridge Volunteers, said:—"A course of drill develops the physical power of the recruit, and the majority of men are thereby rendered more capable of following their civil duties, because every one of the qualities which go to make a man is impressed and invigorated by the course of discipline, and because men thus learn to act together as one compact body and subordinate themselves to constituted authority. This was impressed upon me by my five years' naval training. We see the truth of my remarks exemplified in the case of a great and kindred nation, England's oldest and most continuous ally. The army which Germany supports, not for aggressive purposes, not for the vain pursuit of glory, but simply to defend her own life when threatened, does not, I believe, weigh nearly so heavily on her peaceable and mercantile citizens as some are apt to persuade themselves. The majority of the recruits when they leave at the end of the course of training with the forces are more vigorous men in every respect than when they joined. The steady expansion of German trade and population

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within the past twenty years is the best proof that military discipline, so far from hindering, does, on the contrary, conduce to both individual and national achievement. Method and order, temperance and persistency, combination and enterprise, these are the virtues that, whether in the workshop, the study, the counting-house, or the camp, promote success in life. These virtues are, I hope, being developed in you, in some measure at least, by the course of training in the rifle corps. All German citizens are, by the laws of the land, liable to undergo a period of military training for their country's defence against aggression should need arise. As you are aware, the annual ballot of the militia is from time to time suspended. England, relying upon the security which would be afforded by her strong navy, trusts to the voluntary efforts of her citizens, who will be sufficient to defend her hearths and homes in time of danger. We all desire devoutly that that hour may never come, but if it does I am sure no Englishman would shirk his duty or selfishly seek to withdraw himself from the discipline necessary to secure the safety of the community."

Starved School Children.—At one of the conferences at the Health Exhibition Mr. Marchant Williams, School Inspector of the London School Board, stated that at some of the Board schools 40 per cent. of the children arrived occasionally without any breakfast at all, and that at others 28 per cent. arrived without any dinner. The sufferings of these thousands of unfortunate and enfeebled children are at least in part caused by the ignorance of parents who do not know either where to obtain or how to prepare nutritious food for them. Dr. Guthrie, in starting his ragged schools in Edinburgh, gave the children a good plateful of oatmeal porridge to begin the day. Cheap breakfasts, and cheap soup for dinners, should be procurable in the neighbourhood of every school for poor children. Even halfpenny dinners have been served in the East of London.

New Guinea and the Pacific Slave Trade.—The planters of Queensland have been enlarging their field of supply for labourers, nominally hired by contract, but practically unprotected slaves. Mr. Lawes, the well-known explorer and missionary in New Guinea, has sounded a timely note of warning in the "Times." He says: "Most sincerely, and earnestly do I hope that the Imperial Government will stop the entire traffic in human flesh in all these waters. It is very rarely that the natives' side of the question can be made known. They have no means of making their voice heard. Polynesians who are civilised and advanced may be quite willing to work for white men in Queensland or elsewhere, but these generally want too high a wage for the employers of native labour. To natives less advanced, and those in a primitive state, such as New Guineans, whose life is as free as air and who call no man master, the work and routine of a sugar plantation is simply intolerable. They would rather risk death in any form than endure it. I know enough of the natives here to be perfectly sure that if they knew the life they would not willingly go even for three months. Eighteen months ago I wrote to the Colonial and English Press that which I would reiterate now in the light of recent events: 'You can get men in New Guinea for labour in Queensland if you are prepared to take them by force or deceit; not otherwise. It will save loss, disappointment, and endless trouble if this be clearly understood from the first.' In spite of that warning they have been taken (there is ample proof) by fraud and deceit. The wrong can only be righted by their return."

Canine Sagacity.—The story of a lame dog coming to the Charing Cross Hospital to be treated by the surgeons elicited the following letters to the editor of the "Daily Telegraph": "Sir,—Your story of the dog visiting Charing Cross Hospital is very amusing, but, like everything else under the sun, not new. About fifty years since a dog with leg broken visited a surgery with which I was connected at Newcastle-on-Tyne. After putting splints and bandage on the limb, I ordered the animal to be confined in a box for a few weeks. Some time after being liberated, to my surprise, he one day paid me a visit, accompanied by another lame dog. Now, it strikes me it may try the patience of the good surgeon Bellamy should his lame dog collect all others about

London streets. He would require a veterinary to help him, and perhaps be obliged to add a dog wing to the hospital.—Yours obediently and amused, ROBERT PARSONS. Tonbridge, Dec. 12."—"Sir,—The communication of ideas known to exist between dogs will no doubt be the means of bringing together a concourse of suffering members of the canine race outside the walls of the hospital, as 'our dog' will, without doubt, spread abroad the intelligence of the efficacious medicinal treatment he received. Numerous precedents of such a contingency are forthcoming. A surgeon at Leeds one day, observing a lame dog in the streets, carried him home and bandaged the leg, which proved to be broken, and after keeping him for two days turned him out of doors. But to his surprise the sagacious animal returned each morning to the surgery until his leg was perfectly whole, when he ceased to come. Subsequently, however, the dog appeared in company with two others similarly afflicted as he had been, which with piteous gestures and imploring signs made known the object of their visit.—WILLIAM A. CARTER. The Claylands, South Norwood, Dec. 12."

Canadian Emigration.—A letter recently received by the High Commissioner for Canada from the Minister of Agriculture calls attention to the colony of East Londoners settled in the North-West by help of advances made by Mr. Burdett-Coutts and others. A very favourable report has been received from that colony from Professor Tanner. A colonisation of this kind would involve an advance of five hundred dollars a family; but if the selection of the settlers were made with proper care, and the colony looked after with ordinary business management, such a sum might, it is thought, be safely advanced at a moderate interest. This plan has been found to be successful in the case of the Crofters from the North of Scotland in the Benbecula Colony, settled in Manitoba by the aid of advances from Lady Gordon Cathcart. The conditions of farming on the prairie are very much simpler than in the older provinces, and it is stated that mechanics and artisans may and do very easily in the course of one season adapt themselves to the very simple conditions of agriculture required in the prairies.

French Decivilisation.—The following statements appear in the "Gazette des Tribunaux," a leading legal journal: "Manners in France have undergone a change, and instead of remaining those of a civilised nation, they are tending towards barbarism. People take the law into their own hands, and on that pretence commit the most criminal acts. For some real or imaginary wrong the life of a man is taken, or he is made to suffer some horrible mutilation. Sometimes a revolver is used, sometimes vitriol. Last year an attorney was fired at in his own office. To-day a man has been murdered in the Court of Justice itself. Is there no social justice? Is there no confidence in judges and juries? Are the laws no longer enforced? We must admit that the repression of crime is growing weaker every day. The public powers are responsible for this. Authority is no longer respected. The jury hesitates to perform its duty; it does not feel that it is sustained by authority, or by public sympathy. It is disposed to show every indulgence, and seems to admit that every accused person who has acted under the influence of passion is excusable, and must be acquitted. As if men should not control their passion, and be held responsible for the criminal acts which they commit. The weakness of juries is not spontaneous on the part of the citizens called upon to compose them. It is a reflection of the moral condition of the nation. It is a sign of rapid decay. Should not the public powers seek for a remedy against this abasement of society?"

Savoir Faire.—You scarcely hear of any great success in life but it is achieved by *savoir faire*. You admire Grigsby in the drawing-room; he is a delightful fellow, chats with you, jokes with you, keeps an unflagging interest alive and awake all around him; how do you reckon him up? In fact, he is a master of *savoir faire*. Do you know Fugglewash, your tradesman in the next street, that master of bland courtesies, who has accumulated, as we know, a nice little fortune, and keeps his brougham and his country villa, and for whom most people have some commendatory word to say, as on the whole a thorough good fellow? What is the secret of it all? *Savoir faire*. And you surely know that eminent

pulpit orator, the Rev. Dr. Ravelby? Did you ever hear the oleaginous doctor? *Savoir faire* is the oleaginous faculty. We spent an evening with him not long since; he was delicious, we can't describe how beautiful he was. Nothing wrong, you understand; he never forgot that he was a divine, but somehow it was a body of divinity served up with *piquant sauce*; and a dear old lady said, as he left the drawing-room, "Ah! he is always the same, pulpit and parlor, dear Dr. Ravelby!" Whereupon a gentleman rejoined, evidently with great admiration, "Yes, Dr. Ravelby is a great master of *savoir faire*."—*Paxton Hood's Parables*.

"Striking Ile."—One of the most audacious experiments on record is that which some miners in the Pennsylvanian oil-fields are reported to have lately perpetrated. They had sunk, it appears, a very deep shaft, in the hope of striking oil, but without any success, and, being a trifle impatient at the coyness of the liquid, they proceeded to use violence, and threw shells, containing, in the aggregate, fifty quarts of nitro-glycerine, down the hole, "just to see what would happen." The result was that they saw quite enough to satisfy them. The explosion was immediately attended by a terrific rush of water, which rose in a column ten feet high above the mouth of the pit. This was followed by a volcanic discharge of mud, sand, and stones, and then with a roar the gas burst out, and, pouring up the shaft, overspread the scene in a black pestilential cloud. Before long the wind had blown this on one side, and, like a splendid golden geyser, the liberated oil was seen spouting upwards in a fountain eighty feet in height. The precious stream as it flowed away was dammed, and eventually divided into reservoirs; and these presumptuous miners, it is to be assumed, have by this time barrelled off the eruption and got their dollars.

Ammoniated Bread.—Ammoniated baking powders—that is, baking powders in which carbonate of ammonia is used as an ingredient, and which exhale an odour of ammonia when heated—are classed by many eminent physicians and sanitarians as superior to all others. Professor Hassell, of London, who is recognised as the highest authority on the subject of food hygiene, commends in the strongest terms the use of carbonate of ammonia as a leavening agent, stating its great advantage to be in its perfect volatility, which permits it to be, by the heat of baking, entirely thrown into leavening gas whereby the bread is raised. The first heat of baking will effectually develop all the gas, thoroughly leaven the loaf, and dissipate the gas-producing ingredients, and this is the highest test of a perfect baking powder.—*New York Weekly Tribune*.

Struggle Between an Eagle and a Stag.—Last winter a Strathglass correspondent of the "Scotsman" reported a singular struggle witnessed by him on the lower portion of Corrie Mor, at a short distance above Glassburn House, between a large and powerful eagle and a finely-antlered stag. The king of birds was watched for some time as he hovered about on high above a herd of deer, which appeared to possess particular attractions for him. The noble bird was slowly descending as he majestically sailed around in his aerial circles, and by degrees getting nearer to his coveted quarry. At last reaching striking distance, he suddenly came to a halt in mid-air, and, poising himself on outspread wings, he seemed for a few seconds perfectly motionless. Then, like a bullet from a rifle, he swooped down, and in an instant his powerful talons were firmly fixed in the back of a fine large stag. The monarch of the glen plunged about in the wildest possible manner, evidently in great terror and pain, the eagle holding on grimly, belabouring the stag's sides all the while with heavy blows from its wings, and, when opportunity offered, making desperate darts with his beak at the eyes of the frightened deer. By this time the poor stag's brown sides were red and gory, and, notwithstanding his frantic efforts, he could not disengage himself from his strong and cruel foe. At last, seeming to discover that his antlers could reach his savage enemy, he commenced raking fore and aft with them in the most vigorous manner until he managed to send the eagle sprawling in the heather. The stag had gallantly freed himself; but he had not bounded far when his fierce assailant, recovering from his discomfiture, was

again on the wing, and in full chase, and in a few seconds down he came again, and firmly fixed his powerful claws in the deer's haunches, so far back as to be out of reach of the antlers. Again the struggle was renewed, the eagle meanwhile tearing at the victim's flesh with his strong bill, and burying his talons still deeper into his haunches. The poor stag was now very much exhausted, and was evidently getting the worst of it, as he could not touch the eagle with his antlers. At this juncture, as if in despair, the stag commenced to tumble about, throwing himself on the ground, and rolling over down hill; but still the eagle seemed incapable of letting go its tenacious grip. The stag then put his head down between his fore legs, throwing himself clean over—heels over head—several times. It was indeed a wild, a wonderful, and a most unusual sight. The stag's efforts were at last successful, and getting clear of his murderous enemy he galloped off. The eagle was, however, speedily up again and in full chase; but his intended victim made his escape sure by rushing full speed down the hill into the Glassburn woods. The eagle, rather ruffled in his plumage, and no doubt much ruffled in his temper, soared aloft to look for his dinner elsewhere. It was a hard and well-fought battle, worthy of being delineated by the pencil of a Landseer. The eagle was a splendid specimen of its kind, and of unusual size. He appeared to be much larger than the Glenstrathfarrar eagles, and is supposed to be a poacher from the north or west. His plumage was dark brown, with some white or grey on the surface of the tail feathers, the crown of the head was tawny, the legs and beak yellow, and the claws black.

Prize Fights.—These brutal and demoralising exhibitions have recently been too often witnessed in England. An attempt was made last year to introduce glove fights in public in New York at Madison Square Garden. The principals being arrested, "it was brought out," says the "New York Observer," "on the examination of the arrested prize-fighters, that the 'champion' of America was a saloon-keeper and the champion of England kept a 'beer 'ouse.' The latter testified that he could neither read nor write. Yet these ignorant brutes have been able to make more money in one evening than an honest man could earn in years of useful labour. We notice that the Mayor of Philadelphia has positively forbidden any exhibitions of the kind in that city." In Hugh Miller's "First Impressions of England" there is a notable account of his experiences on arriving at Wolverton, where he intended to remain a night, but found the inn astir with unwonted commotion, and all the surrounding country in excitement about a prize fight. He walked to Newport Pagnell, and here also found every bed engaged. At length he found shelter for the night at Skirvington, a village on the road to Olney, by the direction of a friendly policeman, who cautioned him against attack on the road, saying there had been already several robberies in the neighbourhood, and said, "we have got all the blackguards in England, north and south, let loose upon us." We must watch against a revival of the taste for this form of blackguardism, and hope that our magistrates will act in the matter with as much decision as those of the United States.

The Fresh-water Jelly-fish in the Botanical Society's Tanks.—In the "Leisure Hour" for 1883, p. 422, an account was given by Mr. Sowerby, the Curator of the Royal Botanical Society's Gardens in Regent's Park, of a totally new and extraordinary organism, a fresh-water medusa, or jelly-fish, discovered in the tanks of the garden. Its origin was unknown, and its existence has remained a scientific wonder. Dr. Ray Lankester has recently communicated to the "Times" the following letter: "Every year since its discovery the fresh-water medusa, now known as *Limnocoelum Sowerbii*, has appeared for a few weeks in hundreds in the tank of the lily-house of the Royal Botanical Society, Regent's Park. Every year I have given a good deal of study to it. Until to-day I had no knowledge of the phase through which it passed during the winter months, nor of its eggs. Strange to say, of more than seven hundred specimens of the medusa examined by me at different times, all have been males. How, then, does this jelly-fish multiply itself? The mystery is on its way to a solution. I determined this year to make a careful examination of the lily-tank when the water was drawn off, and by the kindness of Mr. Sowerby

was enabled to do so on November 27, in company with my assistant, Mr. A. G. Bourne. We brought away some of the mud for examination, and some of the rootlets of the floating blue-flowered pontederia, which was introduced into the tank two years before the jelly-fish were first seen, and has always been suspected of having something to do with their appearance. Mr. Bourne has been making a careful examination with the microscope of the mud and of the rootlets of the pontederia, and has to-day found attached to the rootlets in great numbers a minute hydroid polyp, which I have no hesitation in regarding as the hydroid phase of the life cycle of limnocoelium. The polyps are not more than one-twentieth of an inch long, and are at present (during these winter months) probably in a comparatively incomplete condition of growth. We have, however, in them the explanation of the first introduction of the medusae into the tank, and of their survival from year to year, as well as the key to the hitherto paradoxical absence of females."

Washington Monument.—This monument, which has been thirty-six years in construction, was completed December 4th, 1884. As soon as the capstone was set the American flag was unfurled overhead and a salute of twenty-one guns was fired by the militia battery in the White House grounds. The sound of cheers also came up faintly from a crowd of spectators gathered around the base of the monument, while a number of invited guests on the 500-foot platform and in the interior of the monument at that level struck up the "Star-Spangled Banner" and other patriotic songs. The flag over the monument floats from a flagstaff the top of which is exactly 600 feet from the ground, thus displaying the American colours at the greatest height of construction ever yet known in the world. The monument itself, with its total height of 550 feet, overtops every other structure of human hands. A pyramid of pure aluminium, weighing 100 ounces, has been used as a terminal for a lightning-rod for the apex of the Washington Monument at Washington. It looks like burnished silver. A mass of the same size in copper would weigh 326 ounces. A more official inauguration was reserved for the anniversary of Washington's birthday.

Vaccination in South Africa.—The following extract from a private letter of an English medical man practising in the Orange Free State contains some remarkable recent instances of the efficacy of vaccination:—"Everybody in these parts is now convinced of the value of vaccination. There were many sceptics before the outbreak of the disease, but we have had so many conclusive proofs of the value of vaccination that no one here can doubt its efficacy. Among other cases I may mention that a small community of thirty-four Korannas were infected and tried to conceal the fact, but were not long successful. Three had been vaccinated last year. All except these three were stricken with smallpox, and eighteen died. The three vaccinated ones nursed all the rest but did not take the disease. On a Boer's farm I vaccinated the Boer and his children. His wife alone refused the operation; she alone caught smallpox. The whole family lived in a small house, and, although exposed to contagion, not one of the others took the disease." The writer is Dr. George Davis, Government Doctor of Hoopstad, Orange Free State.

A Narrow Escape.—The Swiss mail diligence, which runs between Coire, Chiavenna, and Colico, had a singular escape last winter in the Via Mala. The vehicle was drawn by four horses, and had four inside passengers. The name of the driver is Schwarz and that of the guard Theuss. They had reached the heights of Rouzellan when Theuss, happening to turn round, saw coming after them at full trot a timber-laden waggon, drawn by two horses abreast. It had quite overpowered them, and was pushing them resistlessly down the mountain. The road is narrow and bounded on one side by perpendicular rocks, on the other by the deep abyss through which foams the infant Rhine. There was nothing for it but to keep ahead, and Schwarz, rousing up his team, let them go. Down the hill they sped at full gallop, and in a cloud of dust. The waggon, impelled by its weight, gained on the diligence every moment, and the pole was almost in contact with the back part of the vehicle. In desperation Schwarz whipped his horses, shouted at them like a madman,

and urged them to their utmost speed. Just as they reached the level ground the waggon smashed into the rear of the diligence, which was thrown against and luckily retained by the stone parapet. The four inside passengers were safe, though terribly frightened. Theuss jumped off betimes and unhurt. Schwarz, however, was shot right over the wall. But he had held on to his reins, and planting his feet against the rocky side of the gorge, he climbed in safety up to the road.

Charles Dickens in America.—The sale of tickets for the readings was productive of curious "scenes," caused chiefly by the rush of "speculators." For example: The scene in Boston was as nothing compared with the scene in New York, for the line of purchasers exceeded half a mile in length. The line commenced to form at ten o'clock on the night prior to the sale, and here were to be seen the usual mattresses and blankets in the cold streets, and the owners of them vainly endeavouring to get some sleep—an impossibility under the circumstances; for, leaving the bitter cold out of the question, the singing of songs, the dancing of break-downs, with an occasional fight, made night hideous, not only to the peaceful watcher, but to the occupants of the houses in front of which the disorderly band had established itself. These ladies and gentlemen had my sincere sympathies; for my hotel was within fifty yards of the scene of action, and the shouting, shrieking, and singing of the crowd suggested the night before an execution at the Old Bailey, when executions were still public. . . . When the time for opening the ticket-office arrived, and the police passed the word along the line that "four tickets only for each reading would be sold to each person, and those only to people in hats," the consternation amongst the speculators was great. They, however, were equal to the occasion, for in the lapse of a few moments they had collected all the hats they could from waiters and others in neighbouring restaurants and other places, and by means of changing a hat for a cap at the entrance-door to the ticket-office, the speculators contrived to get into their possession the greater portion of the first seven or eight rows of seats in the hall. By two o'clock in the afternoon of the first day, every ticket was sold, and the amount taken was over \$16,000 for the first four readings.—"With Charles Dickens," by C. Dolby (T. Fisher Unwin).

1799.—An American editor having spoken of 1799 as the closing year of the eighteenth century, a critic calls him to account thus:—"The first century began with the year 1 and closed with the end of the year 100; so the last year of the eighteenth century was the year 1800, and we are now in the nineteenth, because its completion will be with the end of the year 1900. Would you be willing to take 99 for 100 if you were purchasing things by the hundred?"

Music and Work.—The effect of music on the senses was oddly and wonderfully verified during the mourning for the Duke of Cumberland, uncle of George III. A tailor had a great number of black suits which were to be finished in a very short space of time. Among his workmen there was a fellow who was always singing "Rule Britannia," and the rest of the journeymen joined in the chorus. The tailor made his observations, and found that the slow time of the tune retarded the work. In consequence he engaged a blind fiddler, and, placing him near the workshop, made him play constantly the lively tune of "Nancy Dawson." The design had the desired effect; the tailors' elbows moved obedient to the melody, and the clothes were sent home within the prescribed period.—*Musical Herald*.

Mr. Fawcett's Careful Considerateness.—The following instance of the thoroughness with which Mr. Fawcett carried out his conviction of duty is related by a friend of his, Mr. Henry Willett, who had the anecdote from Mr. Fawcett himself. The Post Office is the largest employer of labour in the country, having over 80,000 employés. Amongst these numbers, all are not honest, nor trustworthy, and as every dismissal has to be signed by the Postmaster General, Mr. Fawcett considered it a duty to inquire himself into particulars before taking a step so serious to the person accused. Not long ago defalcations having occurred in a local post-office, a watch was set. Strong suspicion fell on a clerk who

had been caught in using telegrams for racing and betting. As an experiment the clerk was removed to another office for a month, and the irregularities instantly ceased; he was then sent back and immediately they recommenced. What could be a clearer case? He must be dismissed. But no; Mr. Fawcett said, "I'll give him one more chance; for he has been to the Rector, who has written that he confesses his gambling and general misconduct, but solemnly protests he is not the thief. The Rector believes him, and as he has admitted his gambling he may be innocent. If he had denied it, I should be convinced that he was guilty." Further inquiry proved conclusively that the culprit was a guard of the railway train, who had been astute enough to stop his thefts during the temporary absence of the suspected clerk, but who resumed them on his return. "There! you see, Mr. Willett," said the blind Professor, "by a little extra care I saved a foolish young man from the absolute ruin of character which his dismissal from the Post Office under such suspicion would have involved."

A New Railway in Asia Minor.—The ancient and historic city of Tarsus is soon to be the scene of busy commercial life, a railway being in process of construction from Messina by Tarsus to Adana. A firman of the Turkish Imperial Government having been obtained, the governor of the province last year turned the first sod amidst much ceremony and rejoicing. The line is only forty-two miles in length, but will open up a rich and fertile district to modern enterprise and British commerce. The financial prospects of the line are excellent, but it has also the higher recommendation of forming a step towards the completion of the railway system of the Tigris and Euphrates valleys, the great highway of the future between Europe and India.

Books in 1884.—According to the "Publishers' Circular" the new books published in 1884 were 4,832 in number, more by 100 than those published in 1883. Theology claims more than one-sixth of this total—namely, 724. Juvenile works and tales stand second with 603. This is a falling-off of 138 since last year, when this class of books stood at the head of the list. Under the head of educational, classical, and philosophical books we find 543, almost the same as last year; history and geography claim 490; art and science, 432; novels, 408; year-books and serials, 323; voyage and travels, 236; poetry and the drama, 179; law, 163; medicine, 160; essays and monographs, 160; while pamphlets and sermons are assisted by unclassified publications to reach the total of 208.

Dangerous Tricks.—Some years ago an English schoolboy was amusing some of his foolish companions by showing how he could squint. Some of the delicate tendons of the muscles of the eye were so injured that he nearly lost his sight. An American paper records the following incident. A man, Cole, who prides himself on his peculiar talent for making comical grimaces, one day commenced to yawn, and was enjoying a tremendous gape, when he threw his jaw out of joint. He tried to close his mouth, looking with a wild expression around on his companions. They became convulsed with laughter, supposing that Cole was giving them an unusual exhibition of comicality. It was some time before his inarticulate utterances undeceived them. When aware of the serious situation two other men tried to put the jaw back, but were unable to do so. They had to take Cole a tramp of ten miles through the woods to the nearest doctor. His jaw was distended, and he suffered great agony. The doctor succeeded in replacing the dislocated jaw. The shock of the singular mishap was so great to Cole that he was taken seriously ill, and narrowly escaped with his life.

Nice in 1885.—An article in the Paris "Justice" describes, in much detail, the change which has come over Nice since 1879. Till then everything had been done to keep the town quiet and respectable so as to attract families and invalids; the mayor, bishop, judges, and chief inhabitants constantly pressing the Government to put down Monte Carlo, which they felt threatened great mischief. Their successors, however, adopted an opposite policy, got up amusements of all kinds, and accepted from Monte Carlo nearly 300,000 francs

a year. The result is that whereas villas and apartments used to let for six months from October to April, the season is now reduced to the short interval between the races in January and the regatta in March. Most of the hotels do not open till November 15, the promenades are deserted till the end of December, villas are let by the month, and most of them remain empty six or eight weeks, the letting of one being considered a piece of good fortune. The artisans are in great distress, bankruptcies are twice as numerous as in the rest of France, four out of the six stockbrokers are bankrupt or under prosecution, the house owners have a very gloomy prospect, and the Crédit Foncier is obliged to wait for the interest on most of its mortgages, as foreclosure would be still worse for it.—*The Times*.

Wicks of Lamps.—The light of lamps is rendered much more clear and brilliant, without increasing in the least the speed of combustion, by saturating the wick with vinegar, and then drying it till no trace of moisture remains. This treatment applies to all lamps whether supplied by vegetable oil or paraffin and other mineral oils, or smaller lamps in which spirit of wine is used.—*La Femme*.

Great Britain's Coal Consumption.—During the year 1882 an aggregate of 156,499,000 tons of coal were brought to the surface in Great Britain, of which quantity 99,189,000 tons were applied to mechanical uses, and 57,309,800 tons were employed for heating purposes only. The number of tons devoted to various specific objects was as follows:—Paper-making and tanning, 939,000 tons; waterworks, 2,191,000 tons; breweries and distilleries, 2,817,000 tons; railways, 3,130,000 tons; steam navigation, 4,695,000 tons; gasworks, 9,390,000 tons; coal exported, 14,398,000 tons; iron and steel works, 46,950,000 tons; domestic use, 26,918,000.

An American Centenarian.—Mrs. Hoag Mosier, aged one hundred years and sixteen days, died at Lockport, N.Y., last autumn. She well remembered Washington, and was a passenger on Fulton's first steamboat. She left six children, thirteen grandchildren, and seven great-grandchildren. The celebration of her one hundredth birthday was largely attended, all her relatives throughout the country being present.

Dr. Johnson's "Rasselas."—The idea of this tale was derived from Father Lobo's "Travels in Abyssinia," a work in Latin by a Portuguese Jesuit, of which an English translation was Dr. Johnson's first literary venture. The copy of Father Lobo used by Dr. Johnson is still to be seen in the library of Pembroke College, Oxford.

Yorkshire Penny Bank.—We have seen the twenty-fifth annual report of this useful institution, which continues to flourish through good management, notwithstanding the friendly rivalry of newer organisations for thrift, including the Post Office Savings Banks. In the Yorkshire Penny Bank there are deposits to the amount of more than a million and a half sterling. There are branches in every district of the county, and, what is specially gratifying, in most of the schools in Yorkshire. The bank seems in a most satisfactory state.

American Collectors of Books and Manuscripts.—Not only have several copies of the extremely rare first (Kilmarnock) edition of the poems gone to America, but the MSS. of "Auld Lang Syne," "Scots Wha Hae," and the long letter to Mrs. Dunlop of December 15-25, 1793, sold by auction three years ago for £95, have, with a number of other memorials of Burns, also crossed the Atlantic. It has become more than ever evident that the Americans are invading our book markets with their long purses. Thus, to give another instance, at the sale of Lord Clare's library at Sotheby's three seasons back, they secured the cream of that collection. The Americans were allowed to purchase a fine copy of the first edition of Shakespeare's poems for £32, and Scotsmen were unpatriotic enough to permit the original MS. of Scott's "Guy Mannering" to be purchased at a cost of £390 for the United States.

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"LEISURE HOUR" PRIZE COMPETITIONS.

SPECIAL ATTENTION is invited to the following Competitions, in which our readers of all ages are invited to take part. The prizes will be paid in cash, and forwarded to the winners in purses.

I.—ENGLISH COMPOSITION.

Two Prizes of Ten Guineas and Five Guineas will be awarded for the best Paper on

England under Queen Elizabeth and England under Queen Victoria.

The topics of contrast or comparison are left to the judgment of the writers, but the Essays must not exceed Five Thousand words.

Two Prizes of Two Guineas and One Guinea will also be given for the best Acrostic Lines on the names of any Six Classical English Poets, the lines characterising the Author or his Works.

II.—COMPETITION IN DRAWING.

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